Model: Repeat screening for syphilis in pregnancy

Protocol

Produced by: Sheffield Evidence Network for Screening Synthesis (SENSS)

Produced for: UK National Screening Committee (UK NSC)

Version: Protocol

Date: 26 September 2025

Protocol: The Sheffield Evidence Network for Screening Synthesis proposal for critical appraisal and update of the UK NSC 2020 cost-effectiveness analysis of third trimester repeat screening for syphilis in pregnancy.

Authored by The Sheffield Evidence Network for Screening Synthesis (SENSS) group. September 26th, 2025.

<u>**Acknowledgement and Disclaimer note**</u>

<u>**Background**</u>

This proposal is designed to meet the requirements and objectives outlined in the commissioning specification for the critical appraisal and update of the UK National Screening Committee (UK NSC) 2020 cost-effectiveness analysis of third trimester repeat syphilis screening in pregnancy. The methodology involves a review of syphilis screening in pregnancy models and evidence sources for updating the model, reconstruction of the UK NSC 2020 cost-effectiveness model, followed by updates to the model and sensitivity testing. These updates will be developed in close collaboration with stakeholders to ensure that all modifications to the original model align with the expectations of the UK NSC.

<u>**Aim**</u>

To advise the UK NSC whether the UK should offer an additional screen for syphilis in the third trimester of pregnancy based on updating the UK NSC 2020 cost-effectiveness model in this population group.

<u>**Objectives**</u>

- Reconstruct the 2020 Aquarius decision-tree model and document any differences from reported results.
- Obtain and use ISOSS data to map current incidence/prevalence in pregnancy; supplement with targeted rapid review if gaps remain.
- Engage UK NSC/ISOSS stakeholders to review proposed updates, and ensure alignment.
- Appraise structure and assumptions; update key parameters
- Update costs [including lifetime congenital syphilis (CS) impacts] and justify replacements for uncertain values.
- Run deterministic & probabilistic sensitivity analyses and policy-relevant scenarios (e.g., regional incidence, uptake).
- Deliver the updated Excel model, model specification document, final technical report in UK NSC format.

<u>**Evidence map for incidence and prevalence**</u>

To address critical model parameters relating to syphilis incidence and prevalence in pregnancy, and reflecting the commissioning specification concerning the recent increase in incidence in the UK, a targeted review will be conducted. Table 1 and Table 2 summarise the search strategy and PICO of the targeted review to retrieve the most up-to-date incidence and prevalence estimates relevant to the UK.

The first step will be a formal request to the Integrated Screening Outcomes Surveillance Service (ISOSS) for access to the most recent and granular national data on syphilis in pregnancy. Table 3 summarises the data we propose to obtain from ISOSS. ISOSS data is the gold standard for congenital syphilis (CS) and maternal syphilis epidemiology in England and provides detailed, case-level data. The model produced for the UK NSC (Aquarius Population Health, 2020) did not use this data, which was not available when the model was built.

The request will seek annual and period prevalence and incidence data, breakdowns by timing (early or late pregnancy), initial and repeat screens (for high-risk cases), and pregnancy outcomes including CS, neonatal death, and Intrauterine Foetal Demise (IUFD). We will also explore, where possible, the potential of using ISOSS data to relax assumptions in the Aquarius Population Health model on the differences in pregnancy outcomes by timing of infection and gestational age.

If ISOSS data are sufficient to fulfil all model requirements, no further review will be necessary. However, if ISOSS data do not fulfil all model requirements due to incomplete data, lack of outcome stratification, or missing breakdowns by repeat screening status, or lack of differentiation by incident and prevalence cases, we will search peer-reviewed and grey literature. The focus will be on retrieving the most recent high-quality studies and surveillance reports from the UK and, where necessary, comparable high-income countries. This rapid review will have a clear inclusion focus: only studies reporting incidence and prevalence of syphilis in pregnancy with a clearly defined screening protocol will be included.

When using ISOSS data and any potential supplementary sources, we will take particular care to ensure that the incidence and prevalence data are representative of the overall average risk antenatal population, rather than limited to high-risk subgroups or those undergoing risk-based repeat screening. This approach is aligned with the guidance in the UK NSC commissioning briefing. Data will be extracted using a structured template to capture setting, screening protocol, incident and prevalence cases by timing and sub-group stratification, geographic area and timeframe. In this context, the geographic area and timeframe is all pregnant women attending their first antenatal screening appointment in England in a given year. If alternatives are used in the source data, such as a population that includes women identified as high-risk or those who received repeat screening, this will be clearly specified, and the implications for the representativeness of the data will be discussed. Any possible uncertainties, bias or data gaps in the incidence and prevalence inputs into the model will be clearly noted and explored in sensitivity analysis in the model update.

Table 1: Search strategy outline: incidence and prevalence

Domain	Description
Data Source	Primary: ISOSS data request (detailed, case-level, annual and period prevalence and incidence, stratified by timing, repeat screening, outcomes)
Possible Supplementary	Rapid review of peer-reviewed and grey literature
Timeframe	2020 (when the Aquarius Population Health model was published) to present.
Countries	UK (priority), plus US, Canada, Australia, Western Europe, other comparable high-income settings
Strategy for Targeted Supplementary Searches	Key grey literature will be sought from national and international agencies (UKHSA, NHS, NICE HTA). References related to incidence from studies in the modelling review will be hand-searched. Citation searching using google scholar: "syphilis" OR "Treponema pallidum"; AND "pregnancy"; AND "incidence" OR "prevalence"; AND "screening"

Filters	Studies must specify timing of diagnosis (early pregnancy, late pregnancy), denominator clarity, and screening protocol used.

Table 2: PICO: incidence and prevalence evidence map

Domain	Description
Population	Pregnant women in the UK and other high-income countries
Intervention	Antenatal syphilis screening (routine and repeat/third trimester), with breakdowns by timing (early pregnancy, late)
Comparator	N/A (descriptive epidemiological focus, but may include comparison of subgroups by single or repeat screening pathway)
Outcomes	Incidence and prevalence of syphilis in pregnancy (annual, period, trimester-specific) by screening protocol. Pregnancy outcomes (CS, IUFD, neonatal death, treatment uptake, etc.)
Study Type	Surveillance reports, epidemiological cohort/cross-sectional studies, public health bulletins, data linkage studies

Table 3: Data Request to ISOSS

Data Requested	Description/Notes
Number of pregnant women entering the antenatal screening pathway	Total count of women starting antenatal syphilis screening
Prevalence of syphilis among pregnant women	Proportion of pregnant women who test positive for syphilis
Incidence of syphilis among pregnant women	Number of new syphilis cases identified among pregnant women
Number of treated & untreated cases of syphilis in pregnant women requiring treatment, categorised by diagnosis timing	Subcategories: previously diagnosed, diagnosed during pregnancy, diagnosed at birth or later
Timing of syphilis diagnoses during pregnancy	Categorised as: <28 weeks gestation, or ≥28 weeks gestation
Number of cases requiring treatment by timing of diagnosis and by pregnancy outcome	Timing: <28 weeks gestation, ≥28 weeks gestation, at birth or later. Outcomes: IUFD, neonatal death, preterm (w/ & w/o CS), term (w/ & w/o CS)
Timing of CS (congenital syphilis) diagnosis	Categorised as: at birth, within 5 weeks after birth, more than 5 weeks after birth
Subgroup analysis (if possible)	Women at high risk who received a repeat screen after an initial negative result

Literature review of economic models and updated model parameters

There are three components to this review: an appraisal of the Aquarius Population Health model, a targeted literature review to update the model parameters, and a targeted review of decision models to further inform the model's update.

A critical appraisal of the 2020 cost-effectiveness model will be conducted to evaluate the extent to which the existing model is fit for reuse when rebuilt in Excel. Parameters and structural assumptions, such as rates of infection between screens, effectiveness of treatment, the real-world costs of diagnosis/treatment, and outcomes by gestational age, will be reviewed in light of the available ISOSS data and findings from the incidence evidence map. Areas for special attention include updated incidence rates, repeat screening uptake, CS outcomes, updated cost data, and examination of uncertainty.

There is a recent systematic literature review of the evidence on the cost-effectiveness of

syphilis screening in pregnant women (Zhang et al., 2024) in which MEDLINE, PubMed, and Web of Science databases were systematically searched for studies published prior to 19th January 2023. Other potentially relevant modelling studies have been published since then.

A targeted review of economic models in the peer-reviewed literature, guided by the PICO criteria in Table 4, will be conducted to determine which parameters in the model require updating. Summary tables will be produced to present relevant information and key outcomes from these models. If evidence gaps remain after this review, an additional targeted review will be carried out using the PICO criteria outlined in Table 4 and 5, to identify and inform any further necessary parameter updates.

Table 4: PICO: targeted review of economic models

Population and subgroups	Pregnant women in the UK undergoing antenatal syphilis screening.
Intervention	Antenatal screening for syphilis
Comparator	No antenatal screening
Outcomes	Summary of models including the following model outcomes: • Total cost of screening of antenatal syphilis • Incremental outcomes (cost, life-years gained, Incremental cost-effectiveness ratio) • Gain in other clinical outcomes (as defined by the study) • Number of lives saved • Additional lifetime health and social care costs attributable to CS • Cost per life saved and cost to prevent one case of CS • CS cases prevented / year • Numbers rescreened to prevent one case CS (if the model covered repeat screening)
Study design	Decision analytic models and economic evaluations i.e. studies comparing at least two alternative interventions in terms of costs and outcomes: • Cost-minimisation analyses • Cost-effectiveness analyses • Cost-utility analyses • Cost-benefit analyses • Cost-consequence analyses

Table 5: PICO: targeted review to update model parameters

Purpose	To identify evidence required to update the parameters of the existing cost-effectiveness model for antenatal syphilis screening, with specific updates determined through the critical appraisal of relevant economic modelling studies.
Population	Pregnant women in the UK undergoing antenatal syphilis screening.
Intervention	Updated parameter estimates for antenatal syphilis screening strategies (e.g., single vs. repeat screening), extracted from the critical appraisal of published economic models and newly available ISOSS data.
Comparator	Existing (original) model parameters and assumptions, as well as alternative approaches used in other published economic models (e.g., no repeat screening, high-risk-only repeat screening).

Outcomes	Revised model parameters where necessary could include: - Syphilis incidence and prevalence rates - Screening uptake rates (first screen, repeat screen) - Diagnostic accuracy of screening (sensitivity/specificity) - Effectiveness of syphilis treatment (during pregnancy and for CS) - Number of women entering the screening pathway - Pregnancy outcomes for cases of Syphilis - Deterministic and probabilistic analysis - Scenario analyses for key policy questions (e.g., impact of changing incidence trends, regional differences, lifetime vs. short-term horizons)
Study Design	Critical appraisal and targeted literature review of published and grey literature (decision analytic models, cost-effectiveness analyses, and relevant epidemiological studies), as well as direct analysis of ISOSS and supplementary data sources to inform parameter update.

Supplementary Review for Advancing Syphilis Model Methodology

If SENSS does not receive other UK NSC modelling topics during the project duration, then we will allocate a modelling member of SENSS due to join during Summer 2025 to conduct a more comprehensive review. The purpose will be to assess the suitability of the studies for modelling the natural history of syphilis. This additional review will not be a stand-alone deliverable but will be included as part of the main report. Findings of this review are intended to form the basis for future syphilis model development beyond the scope of this project, and support a set of recommendations for future models. The review would be of the peer-reviewed literature and might employ a similar search strategy to that in Zhang et al. (2024). Specifically, electronic databases to be searched would be MEDLINE (via PubMed), Embase, NHS Economic Evaluation Database (NHS EED), and Scopus. The search strategy would use a combination of medical subject headings and free-text terms, including "syphilis," "Treponema pallidum," "Pregnancy ", "screening," cost-effectiveness," "economic evaluation," and related terms. The search window is 2023 to present, ensuring full coverage of all studies published since the Zhang et al. (2024) review, and would be updated as necessary during the final month of the project period.

One reviewer would screen the titles and abstracts to identify relevant studies, then review the full texts of those that meet the criteria. If there is any uncertainty, a second reviewer would be involved to reach a consensus. The focus would be on pregnant women in high-income countries, and interventions would include syphilis screening strategies relevant to antenatal care (e.g., universal, repeat/third trimester, risk-based, integrated HIV/syphilis, etc). Economic and epidemiological endpoints would be reported.

Data extraction would use a tailored template, with a focus on key model assumptions and methods. For each study, we would document how the model structure, approach, reported uncertainties, and natural history aspects (including incidence and prevalence) compared to the UK NSC 2020 reference model. In particular, we would assess whether these models address the evidence gaps and uncertainties highlighted in the UK NSC 2020 review, such as the rate of new infections between screens and the costs and outcomes associated with CS. Findings would be synthesised narratively and summarised in tables, with an emphasis on the applicability of data and methods to the UK context and their value for informing future syphilis screening modelling.

Table 6: Search strategy outline: further economic models review

Domain	Description
Databases	MEDLINE (PubMed), Embase, NHS EED, Scopus
Timeframe	Jan 2023 to present
Languages	English (and other languages if highly relevant and with English abstract)
Countries	High-income (UK, US, Canada, Australia, Western Europe, New Zealand, others as justified)
Systematic Review Search Terms	Screening: ("Screening" OR "Test" OR "Diagnosis" OR "Diagnose" OR "Screening"). Syphilis: ("Syphilis" OR "Treponema pallidum" OR "Syphilis infected women"). Economic Evaluations: ("Cost" OR "Economic" OR "Cost-effectiveness" OR "Cost–benefit" OR "Cost-utility" OR "Economic evaluation"). Vertical Transmission: ("Pregnancy" OR "Pregnant" OR "Vertical transmission" OR "Mother-to-child transmission" OR "Antenatal" OR "Perinatal")
Handsearching	The studies included in major review: Zhang et al. (2024).

Table 7: PICO: further economic models review

Domain	Description
Population	Pregnant women in high-income countries (UK, US, Canada, Australia, Western Europe, comparable settings)
Intervention	Syphilis screening strategies in pregnancy (universal, first trimester, repeat/third trimester, risk-based, integrated HIV/syphilis)
Comparator	No screening, single (booking/first trimester) screen, alternative screening strategies
Outcomes	Syphilis incidence/prevalence in pregnancy, CS cases, adverse pregnancy outcomes, cost per case prevented, cost per QALY/DALY, ICER, health/social care costs, number needed to screen/treat
Study Type	Economic evaluations (cost-effectiveness, cost-utility, cost-benefit) and health economic decision models

Summary of model update plan

The update plan will be detailed in a model specification document, which will be completed prior to the submission of the final model and report. The aim of this document is to provide a clear summary of the proposed model structure and methods, supporting early review and feedback from the UK NSC Evidence Team and other stakeholders, and ensuring transparency before the model is rebuilt and analysed.

The model specification will outline the planned methodological approach for updating the cost-effectiveness model. It will describe the proposed model structure, key assumptions, and the use of available data sources including ISOSS and recent literature identified during the review process. The document will set out the input parameters that will be incorporated, such as updated incidence and prevalence estimates and other possible parameters (screening uptake, diagnostic accuracy, treatment effectiveness, health outcomes by gestational age, and cost data). The sources for these parameters will be referenced, and any remaining uncertainties or evidence gaps will be noted. The document will also describe the planned scenario and sensitivity analyses, including how parameter uncertainty will be addressed. The planned analysis will be informed by findings from the targeted literature reviews, the critical appraisal of the existing Aquarius model, and input from stakeholders, including the initial stakeholder workshop.

Specific model update plan

The following summarises the SENSS team perspective of the planned updates, as of August 2025, based on recent meetings with the UK NSC and the ISOSS team. A model specification document will be circulated by 31st October 2025, once we have access to the relevant ISOSS data (please see Table 3).

We will rebuild the Aquarius Population Health model using the information available in the model report. This is because the model used to assess the cost-effectiveness of repeat syphilis screening for all pregnant women in 2020 cannot be provided without additional funding for Aquarius. We will build the new model in Excel and incorporate parameters based on the latest available data for our recommended base case analysis. This model will be internally validated. We will also conduct one-way deterministic and probabilistic sensitivity analyses, and scenario testing, to assess the impact of different assumptions and inputs. We will document any changes or updates to the model structure and underlying assumptions as they are developed, and engage with stakeholders to review and confirm any proposed modifications to the model.

We will provide the updated model to the UK NSC report once the results have been generated. For ease of comparison and in accordance with what has been discussed at recent meetings with the UK NSC, it is our intention to use the same general model structure as that used in the 2020 analysis: a decision tree model comparing a repeat syphilis screen in the third trimester against a single screen, with branches to account for new infection during pregnancy and whether the first screen was conducted in 'early' (i.e. in the first or second trimester) or 'late' (in the third trimester) in pregnancy.

The costs of screening and treatment (for both the mother and the child) and of birth will be incorporated, along with the costs of the following pregnancy outcomes: IUFD, preterm birth, neonatal death and CS. At this stage, we believe it would be appropriate for a lifetime horizon to be used for in the base analysis, with the lifetime costs and health impact of CS considered. The main model outputs anticipated will be the incremental cost effectiveness ratio comparing the repeat screen against the single screen strategy, the reduction in the number of adverse pregnancy outcomes per year under the repeat screen strategy, and the numbers required to screen to prevent one case of each adverse pregnancy outcome and the cost of this.

The joint 2024 annual call submission from NHSE and the UKHSA to reexamine the cost-effectiveness of repeat syphilis screening in the third trimester was motivated by the increase in the reported incidence of syphilis in pregnancy. We will update the model parameters related to incidence, namely the probability of having syphilis at the start of pregnancy and the probability of becoming infected with syphilis during pregnancy. The source will be ISOSS data (detailed below) on the prevalence and incidence of syphilis among pregnant women, or, if unavailable, the number of cases of syphilis requiring treatment diagnosed in pregnant women and the timing of the diagnosis and the number of untreated cases.

We will request this information stratified by the pregnancy outcomes: IUFD, preterm birth,

neonatal death and CS. This stratification is to align our approach with that taken in the Aquarius analysis, in which the probability of each outcome depends on the timing of syphilis infection and of diagnosis (whether <28 weeks gestation or ≥28 weeks gestation). We also plan to make use of regional estimates of prevalence and incidence, as alternative parameter value estimates in scenario analyses.

We will update the cohort size used in the analysis. This was previously based on the number of deliveries in the UK in 2017/2018 (and the estimated screening uptake). It therefore does not account for IUFD, which is one of the modelled outcomes. We propose basing the cohort size on the number of pregnant women entering the antenatal screening pathway in the latest screening year.

We will update the costs to reflect the current year prices, as is standard practice when updating cost models. The commissioning document mentions that there was significant uncertainty around the lifetime estimate of health and social care costs for individuals with CS. What was used were cost estimates for cerebral palsy from a single 2009 study from Denmark, with services included in the social care costs that would not usually be included in the UK definition of personal social services. Therefore, a key element of our review of evidence sources to update the model will be to seek another value that could be used as a more appropriate estimate for the costs of being born with CS.

In the Aquarius model, 40% of infants born with CS were assumed to display signs at birth, with the remaining 60% displaying signs days or weeks after birth. If the timing of CS diagnosis at or after birth is available in the data, we propose updating this.

Following our discussion with ISOSS members on 2nd July, and in line with the points outlined above, we will submit a request to ISOSS for the data summarised in Table 3.   We propose using ISOSS data from the most recent screening year for the updated base case analysis. Data from previous years will be used for comparative purposes. If the data allow identification of a subgroup of women at high risk who received a repeat screen after an initial negative result, we will request that their data be provided separately.

Deliverables

Protocol and evidence plan:

This project proposal details the literature review and data collection methodology, PICO framework, and model appraisal and current model update plan. The protocol will be submitted within the first month of project commencement and updated following initial project team meetings and feedback from the UK NSC Evidence Team.

1. Model Specification Document:

This document will provide an account of the methodological approach that will underpin the redevelopment and update of the cost-effectiveness model. It will serve both as a roadmap for the model build and as a record of the planned update for stakeholders, and ultimately will form the core of the methods section in the final project report.

2. Final model:

The 2020 Aquarius Population Health model will be reconstructed in Excel using information from the original model report. Following the appraisal of the Aquarius Population Health model, review of the latest available evidence and decision models, and feedback from the UK NSC evidence review team on planned updates, a revised model will be developed and provided to the UK NSC. The revised model will be internally validated and include deterministic and probabilistic sensitivity analyses, along with scenario analysis for policy-relevant questions (e.g., changing incidence trends based on regional estimates, different screening uptake). All structural and parameter changes will be clearly documented and justified in the Model Specification Document and Final report.

3. Final report:

The final report will be provided in the UK NSC report format and will include full documentation of all changes, results, scenario and sensitivity analyses, and will discuss implications for UK screening policy. It will also include recommendations for future model development beyond the scope of this project. A clear executive summary, intended to be accessible to decision-makers, clinical stakeholders, and the public, will also be included.

4. Post–final report (review, consultation, and decision-making):

Following submission of the final report, the UK NSC evidence team reviews the materials and arranges a presentation of model results to the UK NSC Fetal, Maternal and Child Health (FMCH) group, who provide feedback. The report is then issued for a three-month public consultation. The evidence team collates and synthesises all consultation comments and responds to key themes; where technical issues are raised, SENSS provides clarifications and implements any necessary amendments to the report. FMCH is re-engaged for review of the responses and any revisions. Once FMCH is satisfied, the SENSS team presents the results to the UK NSC (or circulates them by correspondence if required), after which the UK NSC considers the evidence and issues its final recommendation.

Expert engagement

The model will be developed through an iterative process, with ongoing consultation and engagement with clinical experts and other stakeholders. This collaborative approach will help ensure that the model's assumptions are appropriate, the disease is accurately represented in the model, and the decision problem is adequately addressed. An initial expert stakeholder meeting will be held during the model conceptualisation phase to review the proposed modelling approach and to refine key assumptions. Towards the end of the project, a final expert stakeholder meeting will be convened to present the model findings and discuss their implications, ensuring that stakeholder input is reflected in the final recommendations and outputs. The SENSS team will organise and facilitate these workshops, and maintain regular dialogue with stakeholders throughout the project via email and online meetings as needed.

Timeline

1st July 2025 – 31st August (Month 1–2): Project initiation & protocol

- Project initiation activities, ISOSS data requests, protocol drafting

- **Deliverable 1:** Protocol and Evidence Plan
  Submit a detailed project protocol covering the literature review and data collection methodology, PICO framework, and the model appraisal/update plan. This will be submitted within the first month and updated after initial project meetings and feedback from the UK NSC Evidence Team.

1st August – 31st October (Month 2-4): Model rebuild, **initial model appraisal, conceptual modelling and stakeholder consultation**

- **Model rebuild, initial appraisal and conceptual modelling:**
  Initial appraisal of the Aquarius model, focussed on assumptions and parameters that could be revised/updated. Rebuild the Aquarius model in Excel using the information available in the model report. Investigate any discrepancies between the results of the rebuilt model and the outcomes reported in the Aquarius model report.

- **Expert engagement:**
  Hold an initial expert stakeholder meeting during this stage to review the proposed modelling approach and refine key assumptions.

- **Deliverable 2: Model Specification Document (by 31st October 2025)**
  A detailed model specification document will be prepared, setting out the planned model structure, key assumptions, data sources (including ISOSS and literature review findings), input parameters, and the intended scenario and sensitivity analyses. The purpose of this deliverable is to provide the UK NSC and stakeholders with a clear and transparent account of the planned methods and assumptions, supporting early feedback and ensuring alignment prior to final model development.

1st November – 28th February 2026 (Months 5–8): Modelling review and evidence review for parameter updates

- Conduct a targeted review of modelling studies and supporting evidence for parameter updates, using the PICO criteria.
- Unless other UK NSC modelling topics are received by SENSS, a more comprehensive review of the other studies will be undertaken, assessing their suitability for modelling the natural history of syphilis and so providing a foundation for future syphilis model development.

1st December – 28th February 2026 (Month 6–8): Further model appraisal, updated model and internal model validation

- Further appraisal of the Aquarius model in light of the evidence mapping and modelling review. Build the final, updated model. Conduct internal model validation.

- o **Expert engagement:**
  Hold a final expert stakeholder meeting at this stage to present and discuss findings, ensuring stakeholder perspectives inform the final recommendations and outputs.

1st - 30th March (Month 9): Uncertainty analyses. Report writing

- o Sensitivity and scenario analysis. Potential analysis requested at the final expert stakeholder meeting.

- o Write the report and disseminate findings at policy relevant stakeholder meetings.

31st March 2026 (Month 9): Pre-consultation report

- o **Deliverable 2:** Pre-consultation model
  Deliver the updated Excel-based model.

- o **Deliverable 3:** Pre-consultation report and executive briefing
  Deliver report, with appraisal of the Aquarius model, documentation of changes, scenario/sensitivity analyses, results and policy implications. This will include a clear summary and executive report for the UK NSC, suitable for decision-making, stakeholder engagement, and public consultation.

29th April 2026: FMCH feedback & model presentation

- o SENSS presents the model results to the FMCH reference group.
- o FMCH provides feedback on the report.

1st May – 31st July 2026: Public consultation (3 months)

- o The model report is sent for public consultation.
- o Stakeholder engagement continues as required.

August 1st to 31st 2026: Collate responses, address themes, and amend report

- o The UK NSC evidence team collates all consultation comments, selects and responds to key themes.
- o The SENSS team provides input on technical comments and makes edits where required.
- o **Deliverable 4:** Final report and final model.
  The report and model are amended to address FMCH and public consultation comments.

24th September 2026: **FMCH review of consultation responses**

- o FMCH provides feedback on the report.

26th November 2026: UK NSC final recommendation

       ○   SENSS presents the model results to the UK NSC (or circulates via email if decided nearer the time).

       ○   The UK NSC considers the final recommendation.

Ongoing:

Monthly meeting of SENSS with the UK NSC to ensure alignment with UK NSC priorities and maintain responsiveness to new evidence and feedback throughout the project.

<u>**References**</u>

Aquarius Population Health (2020) *Repeat screening for syphilis in pregnancy as an alternative screening strategy in the UK: a cost-effectiveness analysis*. Prepared for the UK National Screening Committee. Commissioned by Public Health England. Retrieved August 1, 2025, from UK National Screening Committee website: https://view-health-screening-recommendations.service.gov.uk/syphilis/

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