



# 2020 Surveillance review of jaundice in newborn babies under 28 days (NICE guideline CG98)

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# Surveillance decision

We will not update the <u>NICE guideline on jaundice in newborn babies under 28 days</u> (NICE guideline CG98).

#### Reasons for the decision

New evidence was found to be broadly consistent with the current recommendations.

#### Care of babies with prolonged jaundice

Topic experts suggested that the guideline should consider recommending thyroid functioning tests (TSH and FT4) in babies with prolonged jaundice. This reflects the recommendations in <u>Public Health England's laboratory guide to newborn screening in the UK for congenital hypothyroidism</u> (2014). We consulted on revising this recommendation by adding in the words 'and if no cause of prolonged jaundice has been identified, carry out diagnostic tests (TSH and FT4) for congenital hypothyroidism'. Stakeholders agreed with this proposal and we will revise this recommendation accordingly.

For further details and a summary of all evidence identified in surveillance, see appendix A.

# Overview of 2020 surveillance methods

NICE's surveillance team checked whether recommendations in the <u>NICE guideline on jaundice in newborn babies under 28 days</u> remain up to date.

This standard surveillance review consisted of:

- Feedback from topic experts via a questionnaire.
- A search for new or updated Cochrane reviews and national policy.
- Consideration of evidence from previous surveillance in 2012 and 2014.
- Examining related NICE guidance and quality standards and NIHR signals.
- A search for ongoing research.
- Examining the NICE event tracker for relevant ongoing and published events.
- Literature searches to identify relevant evidence.
- Assessing the new evidence against current recommendations to determine whether or not to update sections of the guideline, or the whole guideline.
- Consulting on the proposal not to update and ratifying suggested recommendation amendment with stakeholders.
- Considering comments received during consultation and making any necessary changes to the proposal.
- After consultation the decision remained the same.

For further details about the process and the possible update decisions that are available, see <u>ensuring that published guidelines are current and accurate</u> in developing NICE guidelines: the manual.

## Evidence considered in surveillance

#### Search and selection strategy

We searched for new evidence related to the whole guideline.

We found 48 studies in a search for randomised controlled trials and systematic reviews published between 1 February 2014 and 4 July 2019.

We also included:

- 1 relevant study from a total of 4 identified by topic experts
- 3 studies identified in comments received during consultation on the 2020 surveillance review
- 37 studies identified in the previous surveillance review in 2014.

From all sources, we considered 89 studies to be relevant to the guideline; however, we found no new evidence that would affect the guideline at this time.

See appendix A for details of all evidence considered, and references.

# Ongoing research

We checked for relevant ongoing research; of the ongoing studies identified, none were assessed as having the potential to change recommendations.

# Intelligence gathered during surveillance

## Views of topic experts

We considered the views of topic experts who were recruited to the NICE Centre for Guidelines Expert Advisers Panel to represent their specialty. For this surveillance review, topic experts completed a questionnaire about developments in evidence, policy and services related to the guideline.

We received 4 responses: from a consultant in laboratory medicine, a consultant neonatologist, a consultant clinical scientist medical physicist, and a consultant in metabolic medicine and pathology.

Two experts thought an update was not needed. However, the other 2 experts thought the guideline should be updated and the guideline should consider a specific recommendation to perform thyroid function testing (TSH and FT4) in prolonged jaundice. They shared concerns that some babies with congenital hypothyroidism are missed and if there are clinical concerns, then the relevant diagnostic tests (TSH and FT4) should always be performed. There were no other comments from topic experts.

#### Views of stakeholders

Stakeholders are consulted on all surveillance reviews except if the whole guideline will be updated and replaced. Because this surveillance proposal was to not update the guideline, we consulted with stakeholders.

Overall, 3 stakeholders commented, 1 from a charity, 1 from a clinical reference group and 1 from a royal college. Two stakeholders agreed with the proposed revised wording of recommendation 1.7.1 and 1 did not comment. Two stakeholders agreed with the decision not to update, whereas the other did not agree because they believed there were gaps in the guideline regarding the care of babies with jaundice over 14 days and the risk of hearing loss in babies with bilirubin levels that are high enough to meet the criteria for exchange transfusion.

#### **Detection of hearing loss**

One stakeholder provided details of 4 cohort studies that showed that hearing loss was associated with high bilirubin levels and suggested that the guideline should recommend that babies who meet the criteria for exchange transfusion should have hearing tests. Public Health England updated their <a href="newborn hearing screening programme operational guidance recommendations">newborn hearing screening programme operational guidance recommendations</a> in November 2019 and state that jaundice at exchange transfusion level does not require an immediate or targeted referral to audiology, suggesting that there is no need to update the NICE guideline at this time.

#### Care of babies with jaundice over 14 days

During consultation, a stakeholder noted that there is little within the guideline regarding

the care of babies who have had prolonged jaundice for more than 14 days. Section 1.7 on care of babies with prolonged jaundice recommends that in circumstances where there is prolonged jaundice, a full clinical examination is conducted, and expert specialist advice and care is followed as necessary. As stated in NICE's treatment threshold graphs for assessing whether to treat neonatal jaundice by phototherapy or exchange transfusion, the guideline does not cover treatment with phototherapy and exchange transfusion for babies older than 14 days, and trusts should therefore agree their own policy about when to treat babies over 14 days with phototherapy and exchange transfusion. No evidence was found suggesting that the guideline should be updated at this time.

After consideration of the comments raised at consultation, it is believed that the guideline is currently still safe and effective, and an update is not needed at this time.

See appendix B for full details of stakeholders' comments and our responses.

See <u>ensuring that published guidelines are current and accurate</u> in developing NICE guidelines: the manual for more details on our consultation processes.

### **Equalities**

One equality issue was raised at consultation about a study that considered using a smartphone app to diagnose jaundice from the babies' skin colour; however, this study only involved children of Caucasian background. There is therefore an equality issue in that this study did not consider other ethnicities. This is noted in the evidence summary.

## Overall decision

After considering all evidence and other intelligence and the impact on current recommendations, we decided that no update is necessary.

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