National Institute for Health and Care Excellence

Quality Standards Advisory Committee 2 meeting

Date: Tuesday 9 April 2024

Meningitis (bacterial) and meningococcal disease update – prioritisation of quality improvement areas

Minutes: FINAL

Quoracy: The meeting was quorate

Attendees

Quality Standards Advisory Committee 2 standing members:

Sunil Gupta (chair), Anica Alvarez Nishio (vice-chair), Moyra Amess, Esabel Chabata, Julia Gallagher, Peter Hoskin, Rachael Ingram, Devina Maru, Jane Putsey, Murugesan Raja, Louis Savage, Ruth Studley, Mark Temple

Specialist committee members:

Saul N Faust, Ian Maconochie, Michael Bryan, Linda Glennie, Martin Vernon

NICE staff

Mark Minchin (MM), Victoria Fitton (VF), Eileen Taylor (ET), Jean Bennie (JB), Jamie Jason (notes)

NICE observers

Sinead Peare, Victoria Carter, Rebecca Misevic

Apologies

Steve Hajioff, Lindsay Rees, Dominika Froehlich-Jeziorek, Nick Screaton, David Metcalfe

1. Welcome, introductions objectives of the meeting

The Chair welcomed the attendees and public observers, and the quality standards advisory committee (QSAC) members introduced themselves. The Chair informed the committee of the apologies and outlined the objectives of the meeting, which was to prioritise areas for quality improvement.

2. Confirmation of matter under discussion and declarations of interest

The Chair confirmed that, for the purpose of managing conflicts of interest, the matter under discussion was meningitis (bacterial) and meningococcal disease update specially,

- Antibiotics prior to hospital admission and recognition of bacterial meningitis and meningococcal disease

- Investigating suspected bacterial meningitis or meningococcal disease in hospital
- Treatment for bacterial meningitis or meningococcal disease in hospital
- Discharge and follow up
- Information and support

The Chair asked standing QSAC members and specialist committee members to declare any interests additional to those that were circulated, or any interests specifically related to the matters under discussion.

3. Minutes from the last meeting

The committee reviewed the minutes of the last QSAC 2 meeting held on 10 October 2024 and confirmed them as an accurate record.

4. Prioritisation of quality improvement areas – committee decisions

ET provided a summary of responses received during the Meningitis (bacterial) and meningococcal disease update topic engagement, referred the committee to the full set of stakeholder comments provided in the papers and the committee then discussed each of the areas in turn. The committee discussed the comments received from stakeholders and specialist committee members at topic engagement **(in bold text below)**.

General

The committee questioned how many people present with possible meningitis. The committee heard that a recent study showed out of 1000 cases of confirmed meningitis, 180 were bacterial, 423 viral. The rest had no identifier.

The committee discussed vaccine uptake and noted confirmation from specialist committee members that there has been no reduction in the uptake of vaccinations for meningitis in babies and schoolchildren since the pandemic. It was also noted that there are no clear health inequality issues in the delivery and uptake of the vaccination programmes.

Antibiotics prior to hospital admission and recognition of bacterial meningitis and meningococcal disease

As there are guidelines and quality standards for fever in children under 5 and the development of a sepsis guideline, there was concern about potential overlap leading to confusion among clinicians.

The committee considered the challenge of measuring the provision of antibiotics before hospital admission. Concerns were raised about the measurability of statements covering antibiotics administered before arrival at the hospital, particularly regarding defining the denominator.

Regarding the importance of treatment, especially in cases of delay, the committee discussed the need for a quality standard on identifying serious infections in the community. It was considered appropriate for practitioners to administer antibiotics if they suspect a serious infection, given that many causative agents of bacterial meningitis can be detected by PCR. This was mainly for bacterial meningitis as meningococcal disease is rare.

The committee discussed the issue of diagnostic overshadowing in older people, particularly older people with neck stiffness or delirium.

The committee recognised the difficulties in recognising bacterial meningitis and measuring antibiotic provision before hospital admission. In addition, due to significant overlap with other guidelines and challenges in measurement, the committee did not prioritise a statement in this area.

Investigating suspected bacterial meningitis or meningococcal disease in hospital

- Lumbar puncture
- CT scans
- Initial assessment and antibiotic treatment time in hospital
- Cerebrospinal fluid and blood samples

One committee member emphasised the significance of this area, suggesting that two to three statements could be prioritised due to variation in practice observed in hospitals. They highlighted the timing of antibiotic administration, lumbar puncture, and unnecessary imaging as critical areas needing attention, each impacting different patient populations.

The committee discussed the challenges of administering antibiotics within one hour of hospital arrival, and particularly whether it is realistic that a lumbar puncture could be carried out before antibiotics being administered within that 1 hour period. They also discussed the potential usefulness of starting treatment if there is uncertainty, with CT scans being considered if specific symptoms are present.

The committee acknowledged the opportunity to enhance quality of care through appropriate actions, with QS having the remit to facilitate this.

The committee considered broadening the timeline for antibiotic administration to within one hour of contact with a healthcare professional, encompassing both primary and secondary care. The committee agreed that there is difficulty in starting the clock in primary care, and deemed it easier to measure the 1 hour target in secondary care.

The committee also discussed the timing of lumbar puncture and blood tests following antibiotic administration, with considerations for timely clinical decision-making.

Although there was agreement on the importance of statements regarding antibiotics and lumbar punctures within one hour, reservations were expressed about prioritising lumbar punctures before antibiotics.

Concerns were raised about defining a senior clinical decision maker and the practical feasibility of achieving this within one hour.

The committee agreed to prioritise statements on intravenous antibiotics within one hour of arrival at hospital and rapid lumbar puncture, emphasising that this should not be delayed by neuroimaging unless clinically indicated.

Treatment for bacterial meningitis or meningococcal disease in hospital

The committee felt that the antibiotics or steroids used, based on the stakeholder suggestions, were not a priority area for quality improvement. They noted that listeria is extremely rare and affects only a small population. However, they acknowledged that due to the rarity, the small number of affected individuals may not receive the appropriate antibiotics. The committee also noted limited evidence of the impact of steroids in preventing hearing loss in people strongly suspected of having meningitis.

The committee agreed not to prioritise this area.

Discharge and follow up

- **Preparing for hospital discharge**
- **Care after hospital discharge**

Information and support

- **Safety netting information**
- **Information and support after diagnosis**

The committee discussed these areas at the same time.

The committee discussed the importance of having a statement around follow-up, particularly for adult patients. They also highlighted the significance of reviewing infants who have had meningitis at a further follow-up appointment 12 months after hospital discharge due to the challenges of identifying long-term conditions in very young babies.

The committee discussed the importance of audiological assessment for all people who have had bacterial meningitis or meningococcal disease. It was explained that the guideline recommends such audiological assessment for everyone diagnosed with meningitis within four weeks of discharge from hospital. This is because cochlear implants are the only treatment if impairment is identified and delaying the procedure beyond six months limits treatment options. The committee agreed that this type of follow-up is not consistently offered to everyone.

The committee also discussed access to intermediate care, acknowledging that NICE QS173 already covers this aspect.

The committee discussed safety netting, stressing its distinctiveness from discharge information provided to individuals diagnosed with meningitis or meningococcal disease. They explained that safety netting will be useful for individuals with nonspecific symptoms who have not yet received a diagnosis, aiming to guide them on when to seek medical assistance.

The committee agreed that another priority area should be safety netting. People who present with non-specific symptoms need clear information on what to look out for and when to return. It was noted that there's a lack of resources, though some charities do have information which can be referenced.

The committee agreed to prioritise statements on

- on hearing assessment within 4 weeks of the person being well enough – and early referral to cochlear implant
- Follow-up in secondary care – 4-6 weeks post discharge
- Providing safety netting information for people without a diagnosis of meningitis

5. Summary of prioritised areas

- Intravenous antibiotics within one hour of arrival at hospital
- Rapid lumbar puncture, emphasising that this should not be delayed by neuroimaging unless clinically indicated
- Hearing assessment within 4 weeks of the person being well enough
- Follow-up in secondary care – 4-6 weeks post discharge
- Providing safety netting information for people without a diagnosis of meningitis

6. Additional quality improvement areas suggested by stakeholders at topic engagement

The following areas were not progressed for inclusion in the final quality standard as the committee agreed that they were not a priority in relation to the five quality improvement areas already included:

- Impacts on global child health - outside of QS and NICE's remit
- Martha's rule - outside of QS remit
- Vaccination – in the remit of NICE's quality standard on vaccine uptake in under 19s

- Reasonable adjustments and language and communication – these will be considered throughout development of each quality statement
- Amendments to NICE's guideline on fever in under 5s - outside of QS remit. The guideline surveillance team have been informed of the comments made
- Pathogen typing and investigation of clusters of infection – in the remit of NICE's quality standard on infection prevention and control

7. Resource impact and overarching outcomes

The committee considered the resource impact of the quality standard. Comments were made that the quality statement on audiological assessment may have a resource impact if this leads to the use of more cochlear implants, and that there may be a resource impact if more lumbar punctures are carried out.

8. Equality and diversity

It was agreed that the committee would continue to contribute suggestions as the quality standard was developed.

The committee noted the following.

- Issue around transition, if adult and children and young people's services are different,
- Recognition/identification of meningitis in darker skin
- Rural/urban areas – access to services

9. Close of the meeting