NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE guidelines

Equality impact assessment

Suspected sepsis: recognition, diagnosis and early management – source control, rapid antigen tests for sepsis, indicators of organ hypoperfusion, intravenous fluids, and vasopressors, in the NEWS2 population

(update)

The impact on equality has been assessed during guidance development according to the principles of the NICE equality policy.

1.0 Checking for updates and scope: before scope consultation (to be completed by the Developer and submitted with the draft scope for consultation)

1.1 Is the proposed primary focus of the guideline a population with a specific communication or engagement need, related to disability, age, or other equality consideration? Y/N If so, what is it and what action might be taken by NICE or the developer to meet this need? (For example, adjustments to committee processes, additional forms of consultation.)
No

1.2 Have any potential equality issues been identified during the check for an update or during development of the draft scope, and, if so, what are they?
This EIA document is an addendum to EIAs from two recent updates of NG51 Sepsis: recognition, diagnosis and early management (which commenced in June 2022 and May 2023 respectively). This EIA will only cover potential equality issues related to the scope of this further update of NG51 which is considering recommendations on source control, rapid antigen tests, indicators of organ hypoperfusion, intravenous (IV) fluids and vasopressors. It should be read in

conjunction with the document for equality issues identified in the previous updates of NG51 which commenced in June 2022 and May 2023. The June 2022 EIA can be accessed here.

This document has been compiled based on the June 2022 EIA and the May 2023 EIA undertaken for the previous updates of NG51 and subsequent review of potential equalities issues by the committee responsible for this further update of NG51. This update focuses on addressing items raised by the Committee responsible for the current update of NG51 which focuses on the recommendations pertaining to source control, rapid antigen tests, indicators or organ hypoperfusion, IV fluids and vasopressors:

- Age

  NEWS2 is for people aged over 16 years, therefore the recommendations being considered in this update will not include people aged under 16 years. However, people aged under 16 are included in current recommendations and these recommendations will remain in the updated guideline.

  The EIA for NG51 (2016) highlighted that diagnosis of sepsis may be delayed as symptoms such as confusion may not be considered as indications of an acute problem in the groups such as the elderly.

  At the committee meeting (on 13/07/23) it was highlighted that older age is risk factor for Sepsis. NICE CKS (2020) highlights that being over 75 years of age and being very frail are risk factors for sepsis (NICE CKS, 2020). NICE CKS (2020) highlights that age-specific mortality rates were higher at the extremes of age, with the rate in infants under one year being similar to that in people aged 60 years and over (NICE CKS, 2020). The committee have outlined that the additional prevalence and risk associated with sepsis in older people should be considered in this update.

- Disability

  At the committee meeting (on 13/07/23) it was noted that people with a learning disability, people with cognitive impairment (for example dementia) and people with communication difficulties may face additional challenges when describing symptoms, this could lead to further difficulties in ascertaining a diagnosis of suspected sepsis. Specific consideration may need to be given to people with a learning disability, people with cognitive impairment (for example dementia) and people with communication difficulties when developing recommendations.

- Gender reassignment

None

- Pregnancy and maternity

  The NEWS2 should not be used for women who are or have recently been pregnant. The June 2022 and May 2023 update of the NG51 did not consider this population and this update will not consider this population. However, these populations are included in current recommendations and these recommendations will remain in the guideline when this update is completed.

- Race

  No issues were identified during the June 2022 update. At the committee meeting for the May 2023 update (on 13/07/23) it was outlined that people from minority ethnic groups may be at greater risk of sepsis. There is limited UK data that highlights this trend for sepsis specifically, but in terms of broader infectious diseases there is evidence from the USA which suggests that ethnic minorities experience infectious diseases at higher rates (Ayorinde et al 2023). Further evidence from the USA highlights a persistent variability in clinical outcomes across racial groups, with higher rates of morbidity and mortality in sepsis in minority ethnic groups linked to healthcare disparity (DiMeglio et al 2018). This disparity could be linked to a lack of awareness of the need to adjust clinical assessments to consider differences between racial groups, leading to poorer care for these groups. For example, some pulse oximetry devices have been reported to overestimate oxygen saturation levels in people with darker skin, which may lead to them not being treated when treatment is needed unless an adjustment is made in interpreting the test results. The committee have outlined that the risk associated with sepsis regarding race should be considered in this September 2023 update.

- Religion or belief

  None

- Sex

  None

- Sexual orientation

  None

- Socio-economic factors

  No issues were identified in the June 2022 update. At the committee meeting for the May 2023 update (on 13/07/23) it was outlined that socio-economic factors may have an impact on the recognition, diagnosis, and early management of sepsis. Evidence suggests that lower socio-economic status can contribute to an increase in mortality and intensive care unit admission in patients with sepsis (Chiu et al 2019). More generally, people living in lower socioeconomic areas have a lower life expectancy than the general population but there is limited UK data that highlights this trend for sepsis specifically although in terms of broader infectious diseases, antimicrobial resistance, and incomplete/delayed vaccination there is evidence which suggests that people in inclusion health groups and with lower socioeconomic status are consistently at higher risk (Ayorinde et al 2023). There is non-UK (USA) evidence that suggests that the incidence of sepsis disproportionately affects individuals with low socioeconomic status and increases the risk of poorer outcomes (Minejima et al 2021). Evidence suggests that there are increased barriers to care access for people with low socioeconomic status which include cost, transportation, poor health literacy and lack of social network which potentially contributes to the identified disproportionate impacts felt by this group. The committee agreed that socio-economic factors should be considered in this update.

- Other definable characteristics:

  The EIA for NG51 (2016) highlighted that 'history taking' is very important in the process of identifying sepsis, and that people with communication difficulties or those who do not speak English may not be able to give a history. This was raised again during the June 2022 update, and the need to have specific consideration for people who do not speak English or whose first language is not English was raised. This was also included in the EIA for the May 2023 update and applies to this update (September 2023) which focuses on updating recommendations on source control, tests, indicators or organ hypoperfusion, IV fluids and vasopressors. At committee (on 13/07/23) 3 further populations were identified which are also relevant to this September 2023 update:
    - **Newly arrived migrants (including refugees, asylum seekers and unaccompanied asylum-seeking children, irregular migrants)**. There is limited UK evidence that highlights a trend for these populations regarding additional sepsis risks. Non-UK evidence (Danish) highlights that vulnerability towards blood stream infections varies based on migrant status, but overall refugees had a higher risk of bloodstream infections (Nielsen et al 2021). These populations will often embark on arduous journeys and combined with often precarious living and housing circumstances may impact their nutrition and their immune system

contributing to increased risk of infectious disease such as sepsis and making infection source identification and control challenging. This risk may be further increased if they have poor access to healthcare services (Rudd et al 2018). This trend is likely to vary between countries due to differences in immigration patterns, vaccine status, variations in rates of antimicrobial resistance, as well as the impact of previous childhood disease. The committee agreed that these populations should be considered in this update.

- **People experiencing homelessness**. People experiencing homelessness are more likely to delay seeking care and there is non-UK evidence (USA) to suggest that they are more likely to die following an admission for severe sepsis which is linked to the increased likelihood of delayed presentation (Shahryar et al 2014). More generally those experiencing homelessness are more likely to have poor physical and mental health, be more vulnerable to issues associated with alcohol and drug use and can experience significant barriers to accessing health services which given the need for timely management if sepsis is suspected can result in greater adverse outcomes. The committee agreed that people experiencing homelessness should be considered in this update.
- **People with low levels of literacy/health literacy:** Health literacy entail people's knowledge, motivation, and competence to access, understand, appraise, and apply health information to make judgments and take decisions in everyday life concerning healthcare, disease prevention, and health promotion to maintain or improve quality of life during their life course. People with low levels of health literacy are potentially more likely to have not engaged in vaccination programmes and thus more vulnerable to contracting sepsis and potentially delay seeking care if sepsis is suspected. Low health literacy was associated with a decreased likelihood of using preventative health measures, and in one review this was associated with those aged 65 years and over (older age has been identified as a risk factor for sepsis). People with low literacy levels may face challenges in understanding information leaflets relating to their care or recognise the signs and symptoms of sepsis if they develop. The committee agreed that people with low levels of literacy/health literacy should be considered in this update.

1.3 What is the preliminary view on the extent to which these potential equality issues need addressing by the Committee?

- To be actioned as the committee have not yet considered the EIA

Completed by Developer: Emma McFarlane

Date: 08 November 2023

Approved by NICE quality assurance lead: Victoria Axe

Date: 08 November 2023