Sepsis in children: update for general practice
1: May 2016

Sepsis is responsible for an estimated 37,000 deaths annually in the UK and severe sepsis. Although relatively few children are killed by sepsis, the impact can be devastating.

Recent work in secondary care has increased awareness and helped to improve the management of sepsis, in children as well as adults. However, work is less advanced in primary care, which remains the key point of contact for patients who show the signs of sepsis. Diagnosis in children can be particularly difficult.

This update has therefore been collated by NHS England for GPs, practice nurses and other health professionals within primary care. We will be refreshing this information in line with significant developments.

As an illustration of how fast the agenda is evolving, Health Minister Jane Ellison announced to MPs on 25 April that she had asked Public Health England “to develop a national awareness campaign that will focus on the dangerous infections that parents worry about the most, including meningitis, septicaemia and sepsis.”

This is due to be rolled out “before the peak of cases in the winter”.

NHS England’s cross-system action plan for sepsis

In December 2015, NHS England published a cross-system action plan on improving outcomes for patients with sepsis, which explains:

“General practitioners will see many patients with infection, yet only a very small proportion are likely to have sepsis, leading to a low suspicion of sepsis in primary care. With around 70% of cases arising in the community, ensuring that GPs are able to differentiate simple infection from likely sepsis is critical to improving outcomes. Training should also include the value of, and need for, appropriate use of vital signs recording and safety netting.”

The plan is available here:
Updated NICE guideline for sepsis
The National Institute for Health and Care Excellence published a new draft guideline on 11 January 2016 to help healthcare professionals recognise and begin early treatment for sepsis, whatever their NHS setting. Following consultation, the final guideline is due to be published in July 2016.

Launching the consultation, Professor Mark Baker, director of the centre for clinical practice at NICE, said: “We want all healthcare professionals to see sepsis as an immediate life-threatening condition and make sure there are systems in place across the NHS for it to be recognised and treated as an emergency. This new guideline will be the first to provide evidence-based best practice advice on how to quickly identify and treat people with sepsis.”


Full documentation: /guidance/indevelopment/gid-cgwave0686.

Learning from serious incidents: principles for primary care
It is essential that primary care as a whole learns any lessons that arise from serious incidents, such as the death from sepsis of one-year-old William Mead in Cornwall at the end of 2014.

The UK Sepsis Trust admits that, for GPs, identifying sepsis is like looking for a needle in a haystack and the GP would rarely be criticised for failing to diagnose. However, the following principles will help primary care avoid missing significant illness, especially in young children:

- There are four high risk category of patient who may develop sepsis:
  1. Pregnant women
  2. Elderly (over 65, and especially over 85)
  3. Immunosuppressed
  4. Under one year
- The Sepsis Trust suggests that GPs should be particularly aware that any of these groups with a history suggesting infection/flu-like illness should be seen. This enables direct observations, which are critical in informing the GP as to the seriousness of the condition.
- Observations that should be recorded if possible are on the relevant links within GP clinical systems; some systems have a template embedded to help ensure that all fields are filled in.
- There is variation between infants/small children and adults to reflect the ease of obtaining the data (eg BP or O2 saturations)
- The use of oxygen saturation is variable in primary care, but can be a useful tool. However, there are significant limitations for young children and babies.
- Point of Care testing for CRP has been getting some national attention, with positive feedback from advanced nurse practitioners that it is very useful to help decision-making for patients with infection. CRP testing is most established in adults; local experience has also endorsed the value.
- Safety-netting should be as specific as possible and, if possible, accompanied by written information. The sorts of tools that can be used are set out below.
The imperatives are to continue to foster a ‘no blame’ learning culture and to provide as much support as possible to our hardworking primary care workforce. Please continue to send your SEAs to NHS England.

We are also in discussion with the LMCs and CCGs about how to advance this work further.

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Useful tools

Paediatric Handi app
This free app for smartphone and tablet provides expert support to medical professionals as well as to parents/carers in looking after children with the most common childhood illnesses. Localised versions have been developed for Devon and Somerset.

The Handi app is available for both Android and Apple operating systems, via the usual outlets such as Google Play and the Apple Store.

UK Sepsis Trust materials
The Sepsis Trust has a large amount of material to support professionals as well as the public, including a GP toolkit. In addition, it has worked with providers of GP clinical systems to embed templates and information that support the consultation, with required fields of observations. Following relevant data entry this triggers warning fields that prompt the GP to consider sepsis and hospital referral. The fields will only clear when further data entry is made.

The next addition to materials will be an update of the SAM leaflet that was used by NHS England in a pilot project in South Devon and Torbay. The new version has been fine-tuned with further input from families affected by sepsis.

It is designed to support primary care and other professionals as part of the safety-netting process, so parents leave the consultation with a clear understanding of what signs and symptoms to look out for and what action they should take.

See: http://sepsistrust.org/
Kernow CCG leaflet

Kernow CCG has also produced an updated version of the SAM leaflet. As well as being distributed in hard copy, the document is available from the CCG website:

http://policies.kernowccg.nhs.uk/DocumentsLibrary/KernowCCG/WebDocuments/Internet/Communications/PatientInformationLeaflets/SAMBooklet.pdf

Southampton paediatric assessment chart

A simple chart has been developed by Southampton University Hospitals to aid paediatric assessment. This has been adopted by Devon Doctors.

See attachment.

Audit tool for treatment of under-fives

An audit tool has been made available to enable GPs to assess their treatment of febrile children under five against current NICE guidelines. This is designed to raise awareness of sepsis in general practice and to enable GPs to reflect on their treatment.

The tool is available via PRIMIS: http://www.primis.nottingham.ac.uk/hub/login/index.php

Further action on sepsis

Review of GP curriculum

The South West Deanery is reviewing the curriculum for GP registrars to include a specific module on sepsis and safety-netting. In addition, a project for an ST4 is being designed to inform further work in this area from the perspective of a young GP, including review of the best patient-safety tools. Links are being made with the South West Academic Health Science Network, to ensure join-up with the national and local programmes of work. This project is with Heath Education England; learning will be shared when available.

Community education

Community Education Provider Networks are being set up, which will be ideally placed to continue to embed the learning.