

# A Project to assess and improve staff's knowledge and skills in Sepsis Recognition

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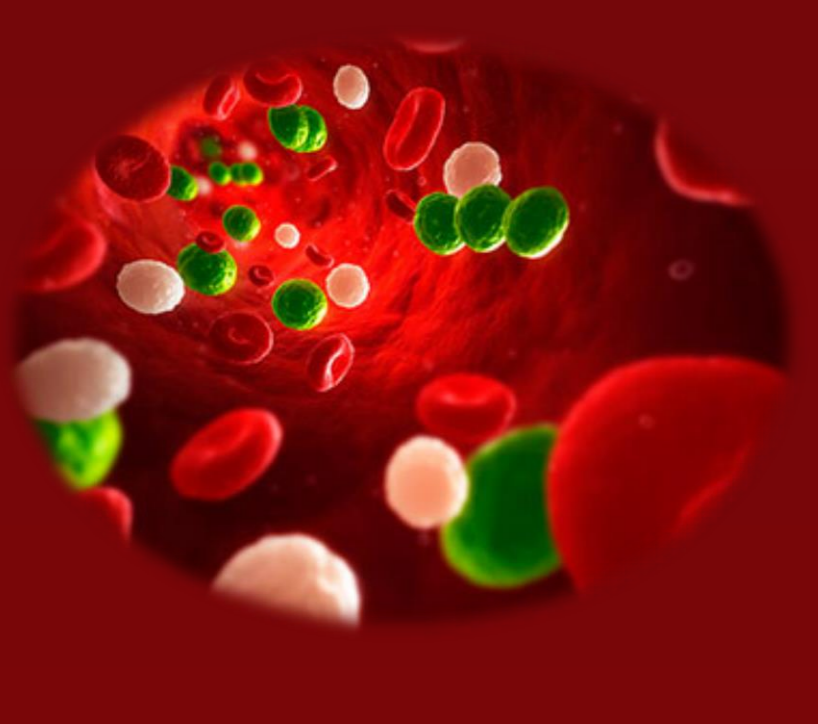


## Aim

The aim of this project was to assess and improve non-medical staff's knowledge and skills in initial assessment and recognition of potential cases of sepsis, and in taking appropriate actions, in accordance with NICE Guidelines on Sepsis Recognition.

## Introduction

Sepsis is a clinical syndrome caused by the body's immune and coagulation systems being switched on by an infection. Sepsis with shock is a life-threatening condition that is characterised by low blood pressure, despite adequate fluid replacement, and organ dysfunction or failure. Sepsis is an important cause of death in people of all ages. People with Sepsis may present with non-specific presentations; as a result, recognition of sepsis can be difficult at times leading to considerable morbidity and mortality. Therefore, it is of crucial importance that particular attention is given to the assessment of people with possible sepsis. This becomes further significant in people with communication problems and sepsis can be especially hard to spot in a person with a learning disability. NICE guidelines, provides evidence-based criteria for sepsis recognition; including high risk criteria, moderate to high risk criteria and low risk criteria. These criteria assist staff in taking appropriate actions, accordingly. Along with medical staff, Non-medical staff such as Nurses and HCAs play a crucial role in initial assessment and provision of care in the Learning Disability Services. Hence, we were encouraged to embark on this project, so as to assess the staff's knowledge and skills in terms of sepsis recognition and accordingly work towards improving our services in relation to Sepsis recognition.



## Methods

Based on the criteria (Sepsis Risk Stratification Tool) outlined by the NICE Guidelines (Figure 1), a cross sectional survey was designed to assess the staffs' knowledge about sepsis recognition (October 2019 – February 2020). Staff, across the North Essex Learning Disability Services, were asked to complete the designed questionnaire (Figure 2).

Following this, a series of teaching and training sessions on sepsis recognition were organised. This was followed by the implementation of the NICE Guidelines on sepsis recognition. The same survey was repeated to examine the effect of the interventions.

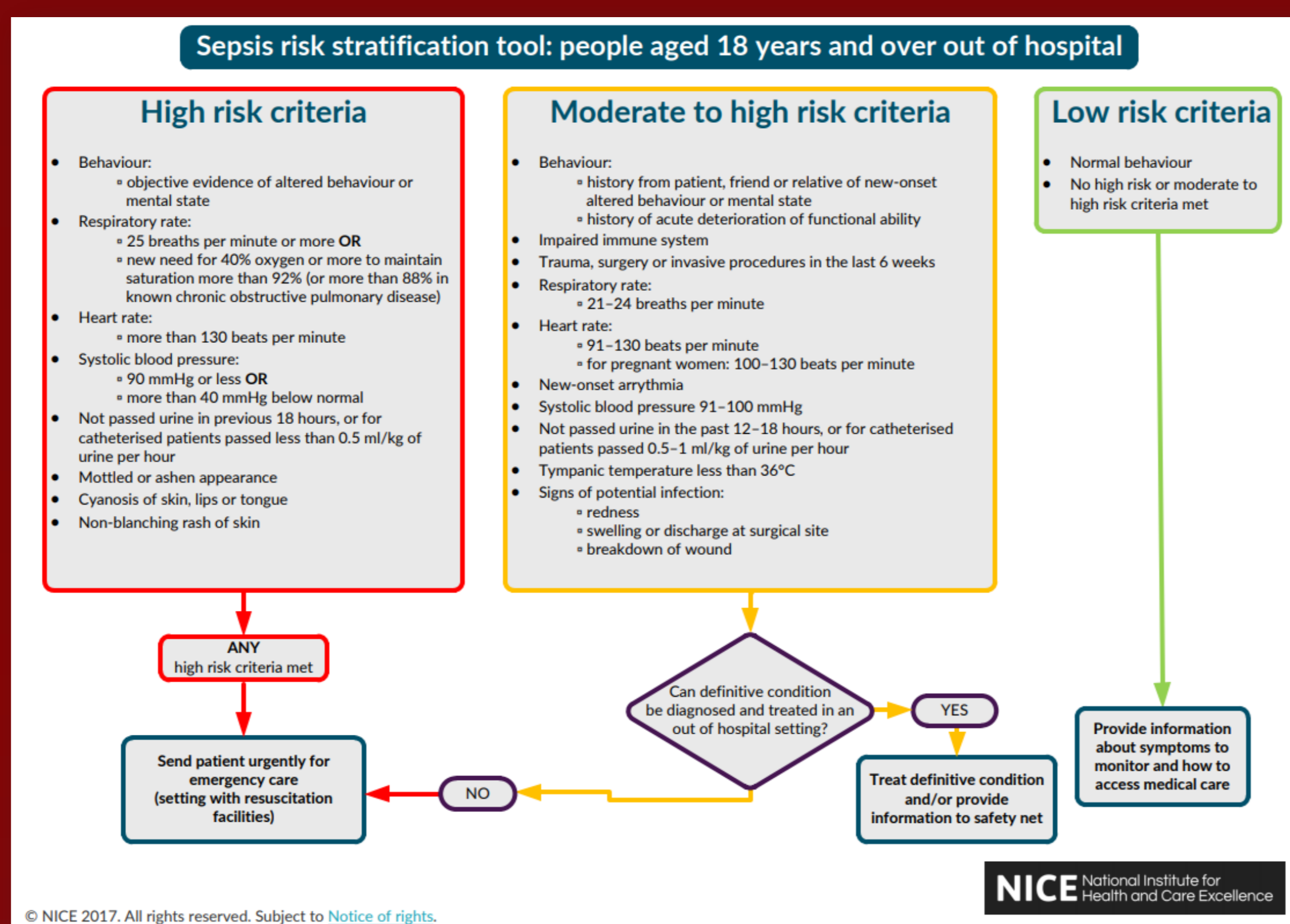
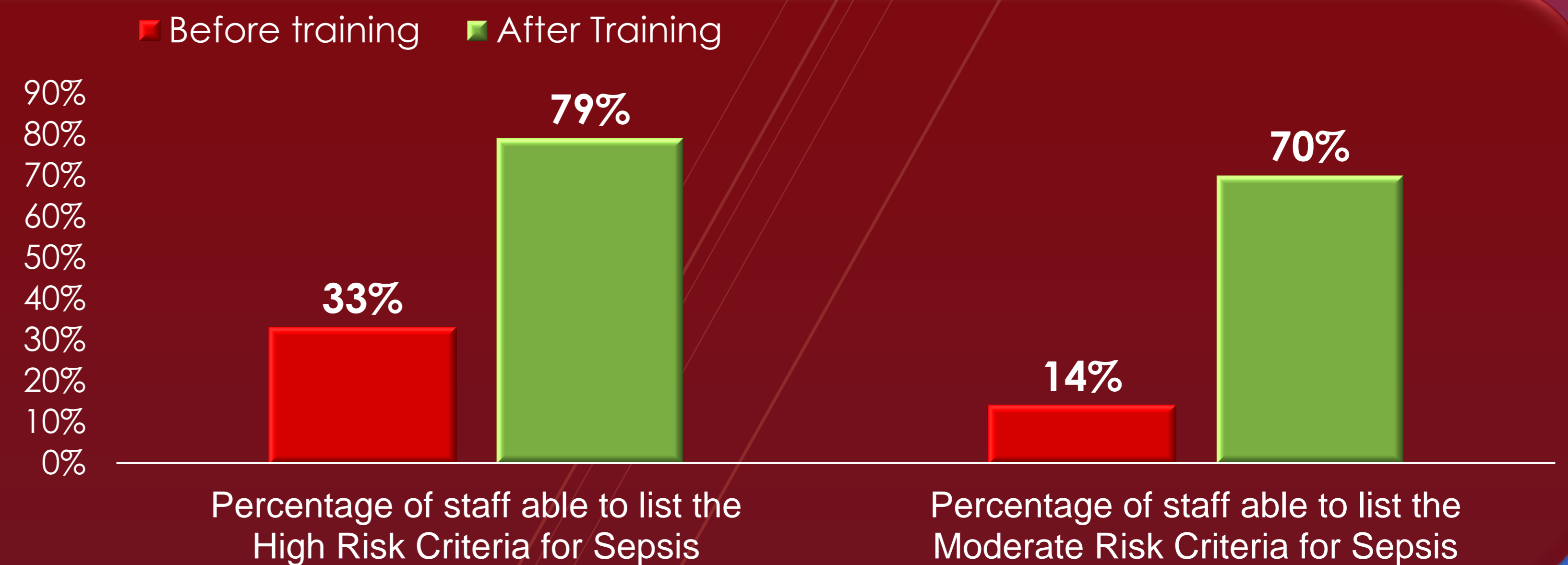


Figure 1

Figure 2

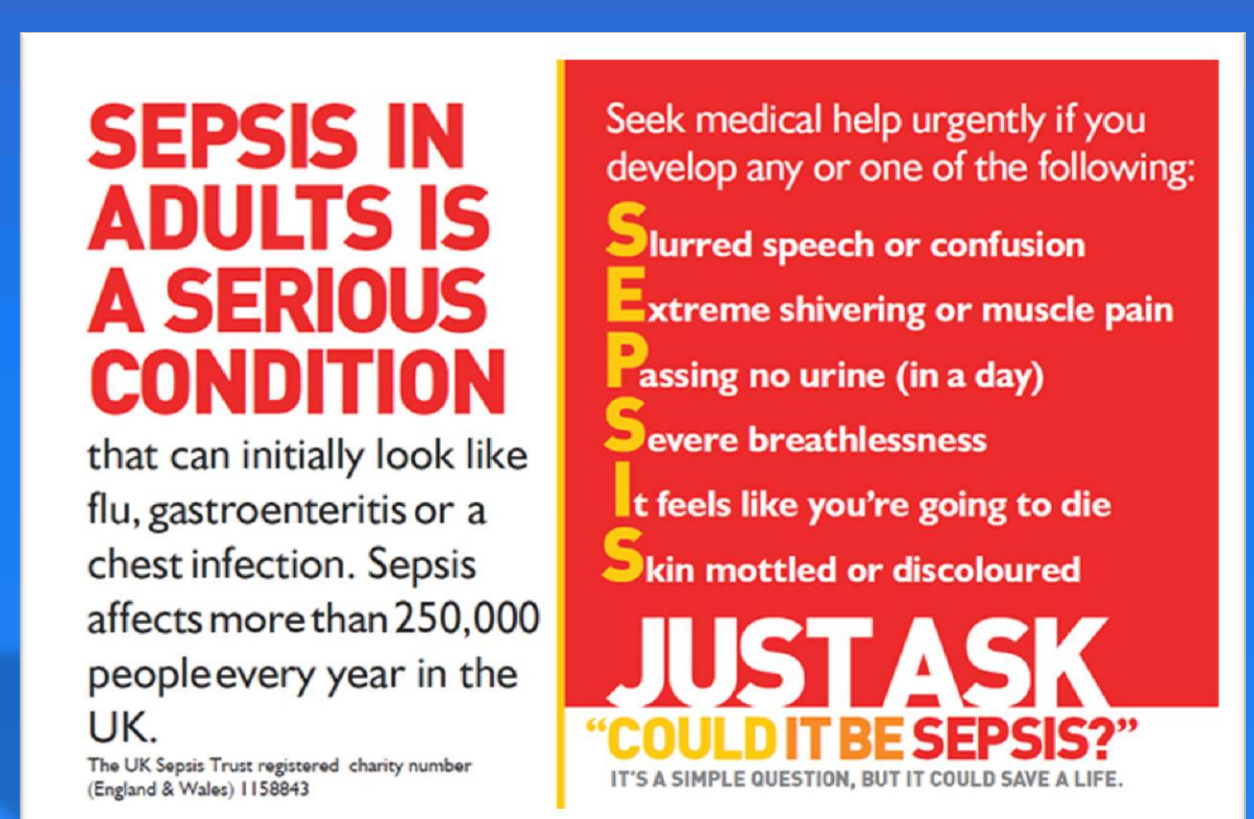
## Results

In total 40 staff members participated in the survey. The initial collected data showed shortcomings in staff's knowledge and skill in sepsis recognition. Before the training on sepsis recognition, on average participants across different sites were able to list 33% of the high risk Criteria for Sepsis (outlined by the NICE Guidelines) and 14% of the moderate to high risk criteria for sepsis (outlined by the NICE Guidelines). Following the training, the collected data showed considerable improvement in staff's knowledge around sepsis recognition, with an average of 79% of the high risk Criteria for Sepsis and an average of 70% of the moderate to high risk criteria for sepsis being listed by participants.



## Discussion

Literature and evidence describe sepsis as a major killer with a considerable number of cases of sepsis in the UK each year, resulting in >44 000 deaths, and much morbidity. That is while many sepsis-related deaths could be prevented with earlier treatment. The key failure in sepsis management is, in fact, NOT recognising sepsis in time. In other words, an essential element in ensuring patient safety is taking appropriate actions based on physical observations and assessments, i.e. based on High / Moderate Risk Criteria for Sepsis. Fortunately, NICE has provided detailed guidelines on sepsis recognition and specific Risk Stratification Tools. Different organisations may need different approaches to implement these guidelines, depending upon their size, function, and needs. A robust evaluation of the current care provided is paramount in order to establish the change required towards putting the recommendations into practice. This approach in turn support services adherence to the recommended care processes. Accordingly, we designed and conducted this survey to examine the staff's knowledge base in relation to sepsis recognition based on the NICE guidelines. This project then worked towards raising staff awareness through a series of teaching and training sessions provided by medical colleagues for non-medical staff and disseminating NICE guidelines on sepsis to be included into staff's day to day practice. Staff's knowledge was also assessed following the interventions to ensure retention and adherence to the guidelines. In our project despite the initial significant shortcomings in base knowledge, the implemented measures effectively resulted in significant improvement. Of course, it should be noted that different practitioners and different services may respond to measures with different rates and tailored approaches are required to support them based on their needs. Another Important factor is that regular review and monitoring of how well the guideline is being implemented through the whole service play a key role in ensuring the guidelines are followed appropriately.



Spotting the signs of sepsis in adults (The UK Sepsis Trust)

## Conclusions

This project resulted in enhancing staff's knowledge and skills in sepsis recognition, which in turn improves their ability to take appropriate actions. This work suggests that services can provide further education in particular for non-medical staff in order to enhance staff's knowledge and skills in relation to sepsis recognition and accordingly improve the quality of care.

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