

1<sup>st</sup> March 2016

To whom it may concern:

## **CLINICAL ADVISORY STATEMENT SEPSIS-3**

### **The National Sepsis Workstream recommends**

- 1. The Sepsis 6 for all patients with Infection and 2 or more SIRS criteria (Sepsis).**
- 2. That patients in at risk groups (eg elderly, chronic organ failure, diabetes, immunosuppressed, neutropenic) be assessed with a higher index of suspicion and have the extended SIRS criteria checked (there are a total of 24 criteria, all are included in the sepsis screening tool).**
- 3. That the sepsis screening clinical support tool be utilised to assist in assessing all patients who are unwell due to infection in order to give patients their best survival opportunity.**
- 4. This new definition is not without controversy and no immediate changes in the National Clinical Guideline No. 6: Sepsis Management will occur until the planned 2017 update.**

The Third International Consensus Definitions for Sepsis and Septic Shock were published last week in JAMA.

#### Proposed New Definition

- **Sepsis** is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection.
- **Organ dysfunction** can be identified as an acute change in the total Sequential Organ Failure Assessment (SOFA) score  $\geq 2$  points consequent to the infection. This is a scoring system that assigns points 0 to 4 to grade the severity of respiratory, coagulation, liver, cardiovascular, CNS and renal dysfunction/ failure and is a useful predictor of outcome from multi-organ failure in the ICU.
- **For patients outside the ICU** and with suspected infection, discrimination of hospital

mortality with SOFA (AUROC = 0.79; 95% CI, 0.78-0.80) or change in SOFA score (AUROC = 0.79; 95% CI, 0.78-0.79) **was similar to that with SIRS** (AUROC = 0.76; 95% CI, 0.75-0.77)<sup>1</sup>

Of note, SOFA scores are not done routinely outside ICU.

The screening tool qSOFA (RR, Mental Status, SBP < 100mmHg) is proposed to identify these patients outside of ICU at high risk of mortality but has not yet been prospectively validated.

It is the intent of the International Sepsis Taskforce that the altered definition allows clinicians to focus appropriate care on that cohort of patients that need additional support and monitoring. It is not their intent that appropriate fluid resuscitation and antimicrobial therapy should be delayed until a patient develops organ failure.

For some time there has been concern that the SIRS response is inadequately specific to be of use in identifying these patients most at risk. In 2001, in response to this concern, the number of SIRS criteria was expanded from the original 4 (relating to respiration, heart rate, temperature and white cell count) to 24, including inflammatory, organ dysfunction and tissue hypoperfusion parameters. Most sepsis screening tools use the 6 general variables from this update (adding altered mental status and abnormal glucose as these are easily assessed at the bedside) and using the remaining variables to risk stratify or for the further assessment of high risk patient groups. This is for the very practical reason that these variables are largely laboratory based and therefore there are delays in getting results.

‘The task force wishes to stress that SIRS criteria may still remain useful for the identification of infection.’

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Yours faithfully,



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