Recognizing severe sepsis in the pre hospital setting improves the timeliness of antibiotic administration

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Aim
By June 2014, 75% patients with severe sepsis who are brought to RVH ED by NIAS, will have their antibiotics delivered within 1 hour of arrival.

Why?
• Sepsis is estimated to kill 37,000 people annually in the UK.
• Timely and appropriate intervention
  o saves lives
  o reduces likelihood for prolonged hospitalization and input from critical care
• To increase awareness amongst colleagues in NIAS about Sepsis
• To work collaboratively and incrementally with colleagues in NIAS

What?
Pre alerts = Advance notification by NIAS crews of patients being brought to ED

Method
Data was collected each month of all patients who were brought to the RVH ED by ambulance who had a diagnosis of sepsis, severe sepsis, septicemia or septic shock. Each case was reviewed to ascertain if a pre alert was given and when IV antibiotics were administered.

Process Change
• By Feb 2014 90% patients with severe sepsis brought to RVH ED will have a record of whether or not pre alert was given
• By June 2014, 75% brought by ambulance to RVH ED with severe sepsis will have antibiotics administered within 1 hour of arrival.

Results

Conclusions
• Enthusiasm amongst NIAS staff to learn about Severe Sepsis
• Pre hospital tool used as a aid to recognize Severe Sepsis – form not completed for every patient
• Not all patients being brought to ED by ‘999’ ambulances
• Only the start!

Achievements
• Increased awareness amongst NIAS staff about sepsis.
• Development of a tool to enable recognition of severe sepsis in the pre hospital setting.
• Correlation between pre alert and timeliness of administering intravenous antibiotics
• Ability to influence outside area of responsibility

Key Learning Points
• Importance of engagement from the start of the process with key individuals
• Challenges of keeping the process from becoming too unwieldy
• The pre alert assessment tool was used by crews as an aide memoire
• Complexity of the pre hospital system – many variables
• Comprehensive information not always available

Next steps
• Disseminate findings to NIAS crews
• Repeat education event and update based on evaluations from previous event
• Feedback outcomes to NIAS AMD, AMD BHSCT and RVH ED staff.

Key Reference Materials
• http://survivesepsis.org
• http://sepsistryst.org