1. Hello everyone, I am Dr. Charu Malhotraand on behalf of my team in the Departmentof Emergency Medicine at AIIMS New Delhi, I will be discussing our Quality improvement project on strengthening Sepsis Care in our academic department. We will learntoutilise the POCQI model and simple tools of Quality improvement like process flowchart, fishbone diagram and run chart in this setting.
2. Sepsis is one of the most common life-threatening emergencies presenting to the Emergency Department and significant lacunae exist in implementing the Sepsis Bundle in our setting.
3. The challenge with Sepsis is that the presentation may be subtle and hence easy to miss in a particularly high-volume setting.
4. Having identified the problem, we formed a QI team of with members from different cadreswho members were assigned specific roles according to their place of work.
5. Together, we formulated a specific SMART aim: 1.To reduce door to antibiotic time from existing 155 minutes by 30% in a year period. 2.To increase blood culture rates prior to antibiotic administration by 50%.
6. The problem was analyzed in team meeting and a process flowchart and fishbone diagram was drawn.
7. Process measurement was done by collecting the Time of arrival of patients at Triage (t1) and Time of antibiotic administration (t2). Time taken to administer antibiotics was calculated as t2-t1. Blood cultures collection prior to antibiotic administration was also recorded.
8. Recognition of Sepsis at triage was found to be the major bottleneck .

9. The baseline median time to antibiotic administration was 155 mins and no blood cultures were being collected prior to antibiotic administration in the emergency department
10. We first tried two separate sepsis screening tools, which could not be implemented owing to difficulty in application and not found feasible. We then modified our existing red triage protocol and developed a novel sepsis screening tool. This was tested, found feasible and hence implemented.
11. Our second change idea was conducting on-site teaching and training sessions for the residents and staff in the Emergency Department.This proved effective in a setting like the Emergency Department which had staff and residents following a shift duty roster.
12. Third change idea was using a Sepsis checklist which included all components of the Sepsis bundle. This checklist was attached to the patient records at triage.
13. Our fourth change idea was ensuring blood culture bottle availability.This was done by allocating the responsibility of the same to a specific hospital attendant monitored by a nursing in-charge for regular replacement
14. Over time, as we adopted the change ideas, the door to antibiotic time gradually reduced from 155 min to 78 mins. The blood culture rates improved to 67% from baseline.The improvement is still sustaining by regular awareness and teaching sessions.

15. From this quality improvement project, we learnt that simple measures of Quality Improvement can be implemented in the busy setting of the Emergency Department.Early identification of sepsis, identification of which can be a challenge, was found to be the major bottleneck in our study.On- site training is an effective method for teaching and training staff and can be more effective than didactic lecturers.
16. Thank You.