British Association of Critical Care Nurses

NHS
Chelsea and Westminster Hospital
NHS Foundation Trust

CCOT takes the lead in Sepsis

A quality improvement project (QIP) focusing to improve timely sepsis recognition of deteriorating patients, improving timely review and subsequently timely commencement of appropriate antimicrobial therapy.

Virtudazo, MD; Pena, ML; Wellington, L; Dr. Krishnamoorthy, S

WHAT DO WE KNOW?

Sepsis is a leading cause of death. Evidence suggests administration of intravenous antimicrobials within one hour can double chances of survival

Studies demonstrate that early recognition through timely sepsis screening is associated with earlier treatment, and reduced mortality.

WHAT DID WE DO?

Chelsea and Westminster Hospitals FDN Trust has made 'improving sepsis care' as one of its quality priorities.

The QIP had four major components:

1. Data-based leadership
2. Reorganisation of a project team
3. Bespoke education and training
4. Augmenting communication tools and healthy ward vs ward competition

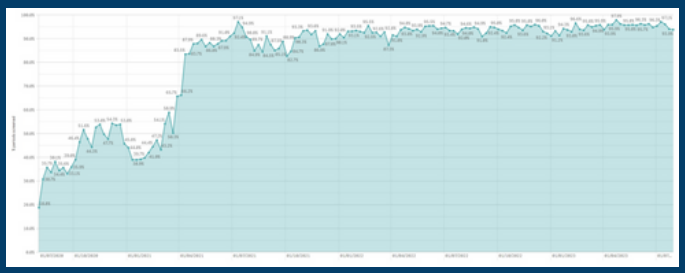
Evaluation focused on the trend in the metrics:

1. Sepsis Screening overall
2. Sepsis Screening < 60 minutes
3. Clinical Review < 60 minutes
4. Antibiotics Administration <60 minutes

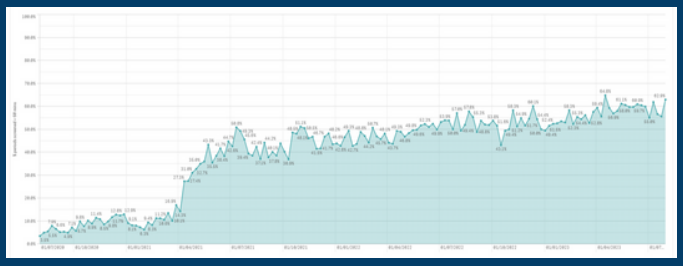
RESULTS

The trust target for screening overall has been achieved and sustained at >90%; compliance on screening <60 minutes has more than tripled; and commencement of antimicrobials continued to be at >90%.

Sepsis Screening Overall



Sepsis Screening < 60 minutes



Organisational structure

Sepsis Six Poster

KEY POINTS

There were several keys to the success of the project:

1. Adopting **Sepsis** as a quality priority with an Executive sponsor ensured that there was accountability across all layers of the organisation.
2. Developing a comprehensive dashboard capturing all adult patients ensured that there was a "true narrative" of the performance.
3. A move during the QIP from calling it a Sepsis Project to "Care of the Deteriorating Patient" shifted the focus to a patient-centered approach. This resulted in significant improvement in buy-in and performance.
4. A multi-disciplinary approach ensured that there was near- peer coaching of staff. This improved the credibility of the message and shared ownership of performance

References:
(1) Ferrer, R., Martin-Loeches, I., Phillips, G., Osborn, T.M., Townsend, S., Dellinger, R.P., Artigas, A., Schorr, C. and Levy, M.M. (2014). Empiric Antibiotic Treatment Reduces Mortality in Severe Sepsis and Septic Shock From the First Hour. Critical Care Medicine, [online] 42(8), pp.1749–1755. doi:https://doi.org/10.1097/ccm.0000000000000330.
(2) Hayden, G.E., Tuuri, R.E., Scott, R., Losek, J.D., Blackshaw, A.M., Schoenling, A.J., Nietert, P.J. and Hall, G.A. (2016). Triage sepsis alert and sepsis protocol lower times to fluids and antibiotics in the ED. The American Journal of Emergency Medicine, 34(1), pp.1–9. doi:https://doi.org/10.1016/j.ajem.2015.08.039.
(3) Jones, S.L., Ashton, C.M., Kiehne, L., Gigliotti, E., Bell-Gordon, C., Disbot, M., Masud, F., Shirkey, B.A. and Wray, N.P. (2015). Reductions in Sepsis Mortality and Costs After Design and Implementation of a Nurse-Based Early Recognition and Response Program. The Joint Commission Journal on Quality and Patient Safety, 41(11), pp.483-AP3. doi:https://doi.org/10.1016/s1553-7250(15)41063-3.