

REDUCING CARDIAC ARREST RATES BY 70% OVER 9 MONTHS ON AN ACUTE RENAL WARD USING ‘CODE RED’ A COMMON LANGUAGE TO OPTIMISE RECOGNITION AND RESPONSE TO AN ACUTELY UNWELL ADULT.

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THE PROBLEM: Renal patients in Acute Trusts are often some of the sickest patients in level 1 and 2 care. Although a small number of cardiac arrests are unavoidable, research has demonstrated that most cardiac arrests have been presaged by physiological deterioration

Aim: We were a pilot site in a Trust Quality Improvement Collaborative with the aim of halving our cardiac arrest rate, as a marker for improved care of the acutely unwell adult

ASSESSMENT OF THE PROBLEM: EWS systems are an evidence-based intervention leading to improved recognition and response to acute illness and less cardiac arrests as a marker of improved care. Despite there being an EWS system in use across the Trust including our acute ward (17 beds +3HDU beds), we had the highest levels of cardiac arrests in the organisation over a one year period. We reviewed our cardiac arrest calls and any ‘near misses’ (ie when patients became more unwell and/or were escalated to a higher level of care) One key finding was that our Early warning score (EWS) was not triggered in a certain subset of patients who were nonetheless very unwell. A second finding was that other patients were readily recognized by experienced clinicians to be ‘at risk’ although no deterioration had necessarily occurred physiologically at a snapshot in time

STRATEGY FOR CHANGE: An improvement ward team was formed from the unit manager, consultant, nurse, trainee doctor and support worker. We used small tests of change (Plan, Do, Study, Act methodology) to improve how reliable our use of EWS was, MDT recognition and response to acute illness. Regular staff meetings, patient safety huddles, and medical ward rounds were used to give updates on the project and to generate further ideas for tests of change. PDSAs have been tried on how clinical observations are taken, how oxygen is prescribed, how oxygen parameters are set by the medical team and recorded by the nursing team, on resuscitation orders, ceilings on escalation of care, recognition of acutely unwell or at risk patients who are not triggering on the EWS (Code Red). We introduced the term “ Code Red” as part of innovation testing as way of highlighting when such a patient exists in our care area. Critically any member of the staff including nursing staff, health care assistants, AHPs and doctors who are worried about a patient can ‘Code Red’ them, regardless of their EWS. Once a patient is tagged with Code Red, he or she is reviewed by a middle grade member of the medical staff immediately and a clear MDT action plan put in place.

EFFECTS OF CHANGES: Every patient, every time, has a manual pulse and manual BP taken, getting staff reengaged and confident in the physical appearances and signs of illness. All patients have their oxygen prescribed to maintain oxygen saturation levels that are correct for the individual patient. Prioritisation of patients is now considered on routine ward rounds which are in the process of becoming structured so the sickest patients get seen first. We have conducted regular sample measures and over time we have achieved 100% completion of all clinical observations, 100% completion of oxygen therapy prescribing Initial concern were that the number of ‘Codes’ would be lead to overburdening of staff or dilution of perceived importance such that it stopped changing behaviour positively. In fact we have found only approximately 5-6 codes per month and the use of the term has led to improved situational awareness, better communication and planning. It is a powerful tool to allow nursing staff to message to doctors so they can triage their work appropriately; it also allows medical staff to get nursing engagement to expedite patient transfer, investigations or increased surveillance. With these combined measures, during the 9 months of the project so far, we have reduced our cardiac arrest rate by 70%.