

Establishing an Activity Network for Patient Orders in Emergency Medicine

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Abstract: Emergent care is a highly time-sensitive ordered operation. Faced with the need for an effective and efficient value stream, emergency departments (EDs) hold the valuable metric of processing times, a good performance indicator. All patients processed by the ED are communicated across the service continuum based on electronic health records that are updated by clinicians in an emergency department information system (EDIS). This study identifies the way an Emergency Department could benefit from a determined activity position for its emergency activity network. We propose an improved activity sequence based on surveyed patients with the shortest processing time for all ED services. The Critical Path Method was used to render the shortest time to complete all activities in the network using aggregate values from a sample of thirty patients. We explore the idea that nonlinearity of activities breeds adverse patient outcomes.

Keywords: Emergency, Process, Improvement, Critical Path, PERT, Electronic Health Records, ED Information Systems