The Robot Physician's (Rp - 7) Management and Care in Unstable ICU Oncology Patients

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Abstract : BACKGROUND: The timely assessment and treatment of ICU Surgical and Medical Oncology patients is important for Oncology surgeons and Medical Oncologists and Intensivists. We hypothesized that the use of Robot Physician's (RP - 7) ICU management and care in ICU can improve ICU physician rapid response to unstable ICU Oncology patients. METHODS: This is a prospective study using a before-after, cohort-control design to test the effectiveness of RP. We have used RP to make multidisciplinary ICU rounds in the ICU and for Emergency cases. Data concerning several aspects of the RP interaction including the latency of the response, the problem being treated, the intervention that was ordered, and the type of information gathered using the RP were documented. The effect of RP on ICU length of stay and cost was assessed. RESULTS: The use of RP was associated with a reduction in latency of attending physician face-to-face response for routine and urgent pages compared to conventional care (RP: 10.2 +/- 3.3 minutes vs conventional: 220 +/- 80 minutes). The response latencies to Oncology Emergency (8.0 +/- 2.8 vs 150 +/- 55 minutes) and for Respiratory Failure (12 +/- 04 vs 110 +/- 45 minutes) were reduced (P < .001), as was the LOS for patients with AML (5 days) and ARDS (10 day). There was an increase in ICU occupancy by 20 % compared with the prerobot era, and there was an ICU cost savings of KD2.5 million attributable to the use of RP. CONCLUSION: The use of RP enabled rapid face-to-face ICU Intensivist - physician response to unstable ICU Oncology patients and resulted in decreased ICU cost and LOS.