

AB130. 147. An initiative, to improve ward level efficiency using a modified treatment room layout in Cork University Hospital and University Hospital Waterford

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Background: An observation was made of doctors performing routine tasks on the ward. Much time was wasted in the treatment rooms gathering equipment required to perform routine tasks such as intravenous cannulation due to poor equipment room layout. The aim was to improve efficiency and decrease frustration.

Methods: We measured the length of time required to gather equipment for intravenous cannulation in treatment room's pre- and post-intervention. We asked the doctors then to fill out a questionnaire about the task. The intervention

standardised the layout for medical equipment in ward treatment rooms. Placing most frequently used items at eye level. SPSS ver 23 was used. T-test and Fishers exact test were used to analyse the data.

Results: The intervention was implemented among 19 inpatient wards between Cork University Hospital (CUH) and University Hospital Waterford (UHW). The mean time taken to collect equipment required for intravenous cannulation decreased from 118 to 29 seconds ($P<0.0001$). The frustration experienced by house officers in gathering equipment decreased from 57% to 6% ($P<0.0001$). Asking a nurse or care staff for help to find equipment went from 30% to 0% ($P<0.0001$). Correlating the reduced time to the number of interns ($n=66$) and average number of cannulas (2.36) inserted in the two hospitals to gather items for an IV-line results in a time saving of 231 minutes per 10 hours shift was achieved.

Conclusions: The layout of ward-based treatment rooms should be assessed and a LEAN standardised layout for medical equipment should be adopted across hospitals.

Keywords: Ward efficiency; standardisation; reducing frustration; lean

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