Materials Management of a Busy Emergency Department

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Study Objectives:
Proper materials management in an Emergency Department (ED) is crucial in order to efficiently and effectively take care of patients. Studies suggest that stocking should be done routinely to ensure that at least 95% of the time patient rooms do not run out of stock during a shift. However, one study proposed that at a minimum, 8% of a shift, almost one full hour of a 12-hour shift, is lost retrieving supplies that are not available in the room. The study objectives were to determine the amount of time ED nurses spend outside of a patient room obtaining supplies to care for the patient and what supplies are most commonly retrieved.

Methods:
This was a prospective, observation study of nurses in a 43-bed ED of a tertiary, suburban hospital. Nurses were observed for an entire shift each time they left a patient’s room to obtain patient care items that were not found in the room. The amount of time spent outside of the patient room obtaining supplies, and what supplies the nurses obtained was recorded. Observations occurred when the nurse began searching for supplies related to procedural tasks associated with patient care and did not include items such as medications or stationary supplies.

Results:
The total number of observations was 610, of these, 75 were excluded; 20 due to discrepancies noted with an observer, and the remaining 55 due to observation of searching for exclusionary supplies. The average time nurses spent away from the bedside each time they left to look for stock, was 1.4 minutes. Nurses working a 12-hour shift left the bedside an average of 13.5 times per shift to look for stock. Therefore, with an average of 15 nurses working in any given 12-hour time period, the overall amount of time spent away from the bedside looking for stock was 283 minutes (4 hours and 43 minutes). In a 24-hour time period with an average of 15 nurses working, the overall amount of time spent away from the bedside looking for stock was approximately 566 minutes (9 hours and 25 minutes). Nurses were sidetracked during their search for supplies 113 times out of a total of 535 observations (21%). The most commonly searched for supplies were: IV supplies/tubing, thermometer, phlebotomy supplies, blankets, saline flushes, syringes, personal hygiene products, gown/clothing, catheter/urine kit, linens, and needles.

Conclusions:
Nurses spend a substantial amount of time leaving patient rooms to search for patient care items during eight and 12- hour shifts. The most common items searched for, were items that would be found in the patient room if properly stocked. Materials management is a strategy that, when implemented efficiently, could help to reduce time wasted searching for patient care items as a result of under stocked rooms in the ED.