Intra-Unit Patient Transports: Time, Motion, and Cost Impact on Hospital Efficiency

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Key Concepts/Context
Transferring patients can be stressful and confusing for patients and their families. In addition, risks to the patient increase during transfers. Thus, many healthcare facilities are trying to reduce patient transfers by providing more flexible patient rooms.

Methods
The researchers observed patient transports at a 750-bed, tertiary-level care facility over a 5-month period. They tracked duration of each task (pretransfer, transfer, and posttransfer) to create a general timeline of tasks and events.

Findings
The researchers found that transport efficiency was 12.4%, and thus inefficiency was 87.6%. Further, their findings indicate that actual transfer labor represents a small portion of the overall time and cost required in the 200 random transports they studied. They posit that the inefficiency of patient transports is a symptom of a larger issue: namely that hospitals need to be designed to limit patient movement to reduce workload, improve efficiency, improve patient safety, create a more patient-centered environment, and improve caregiver satisfaction.

Limitations
This study was conducted at a single location, thus, generalizability is limited.
SYNOPSIS

The researchers' findings indicate that procedures associated with transfers can be optimized through: (1) automation (i.e., an automated physician order entry system with bed control and unit notification to eliminate multiple handoffs, waits, and delays), (2) simplification (i.e., eliminating unnecessary steps in the process, combining tasks, and rearranging fragmented and poorly aligned tasks and events), and (3) integration (i.e., integrating process improvements and automated systems into an organization-wide information technology solution). Furthermore, patient transfers can be minimized by altering facility designs and nursing care models with a three-tiered hospital with super-acute critical care, acuity-adaptable medical-surgical specialty units (e.g., equipment or supports found within the headwall such as gases and lines and cardiac-monitoring capabilities), and an interventional short-stay unit with post-anesthesia support.

Design Implications

The researchers' findings indicate that procedures associated with transfers can be optimized through: (1) automation (i.e., an automated physician order entry system with bed control and unit notification to eliminate multiple handoffs, waits, and delays), (2) simplification (i.e., eliminating unnecessary steps in the process, combining tasks, and rearranging fragmented and poorly aligned tasks and events), and (3) integration (i.e., integrating process improvements and automated systems into an organization-wide information technology solution). Furthermore, patient transfers can be minimized by altering facility designs and nursing care models with a three-tiered hospital with super-acute critical care, acuity-adaptable medical-surgical specialty units (e.g., equipment or supports found within the headwall such as gases and lines and cardiac-monitoring capabilities), and an interventional short-stay unit with post-anesthesia support.