Comprehensive approach to supplies PAR management: Drive process optimization and enhance staff experience

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Background
Medical and surgical supplies stocked in clinical PARs have not kept pace with patient volumes and the diversity of care provided at City of Hope. Patient volumes have increased by over 20% year-over-year since 2019 with the number of clinic expansions and new clinics that have been activated during this time. The stocking quantities of majority of supplies were too low to adequately meet patient care needs during the 24-hour period when the PARs are replenished by Materials Management. In addition, right supplies were not setup and stocked to support the diverse treatment requirements, and, lastly, there were many supplies that were either not needed or being oversupplied, consuming valuable space.
These gaps, have led to clinicians spending excess time on non-patient care related activities such as placing supply calls, waiting for the supplies to be delivered, searching for supplies at the PAR locations, etc.

Objective
Reduce clinician time spent requesting, waiting and locating medical and surgical supplies that are unavailable or not able to be found at their department’s PAR within out-patient and in-patient areas (86 distinct PAR locations). This would drive:
- Reduction in delay of care provided to patients
- Minimized clinician time away from the patient being cared for
- Reduction in out-patient wait times
- Optimized utilization of supply chain resources
- Improved supplies availability from central supply with a more stable supply chain

Planning/Research Methods
First step was to quantify average number of daily ad hoc supply requests, impact on resource utilization, clinician satisfaction and patient experience. 12-month baseline data were utilized for this purpose as well as to establish potential delays to patient care and patient wait times.
Then, identified root causes for the significant number of supply walk-up calls utilizing series of supply chain rounding of the clinical areas, daily huddles, bed meetings, etc. and pareto analysis of the documented observations.

Implementation Methods
Supply chain in collaboration with clinical leadership developed the plan and implementation methodology. Key activities included in the implementation approach were:
- Determine preliminary stocking levels by PAR location for supplies recommended to be maintained on each PAR based on historical usage and patient volume projections
- Ask specific questions to front-line clinical staff to understand operational workflows that may affect stocking levels. E.g. are supplies being pulled from PARs to stock carts inside clinic exam rooms?
- Review data-based recommendations with clinical management and incorporate their input
- Develop consistent space design for supplies organization in collaboration with staff nurses and their managers
- Make agreed upon changes within ERP system and physically to the supply PARs as per the project plan timelines
- Initiate and sustain change management efforts including clinical staff communication, training and KPI tracking

Results
Observed 25% reduction in ad-hoc supply requests during the first three month period post-implementation.
The call volume reduction has translated to 1 FTE time savings for Supply Chain, 30-45min/day reduction in nurse time spent on non patient-care related activities and delays to patient care.
The project has also improved quality of communication and collaboration between nursing and supply chain, and established a data-centric approach within the Organization to making decisions.