Improving Patient Outcomes through Increased Patient Activation and Self-Management Ability in the Adult Surgical Population

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Structured Abstract

LOCAL PROBLEM
Surgical patients represent a vulnerable population and have risks of complications, including inadequate optimization pre-operatively, anesthesia-related harm, hemodynamic instability, surgical site infections, and pulmonary complications. Specifically, the post-surgical phase of care often requires patients to possess self-management competence for health monitoring, wound care, device management, medication management, and physical therapies to mitigate the risk of complications, achieve desired health goals, and return to baseline functional status. The level of patient engagement and empowerment involved with the appropriate utilization of knowledge, skills, and abilities to self-manage one’s health care is referred to as patient activation. Patients with low activation have poor self-management abilities and struggle to experience optimal postoperative outcomes. Nationally, lower activated patients utilize more healthcare resources, experience more health complications, have poor medication management, have significant gaps in knowledge, report increased perceptions of powerlessness, and are more likely to be hospitalized. Locally, organizational data show 46% of patient incident reports involve unmet care needs, knowledge and skill deficits, unrealistic expectations, poor self-advocacy, health illiteracy, or disempowerment. These phenomena indicate low patient activation and suboptimal self-management ability in the adult surgical population.

PROJECT PURPOSE
The purpose of this project is to integrate patient activation science into the care planning and delivery process of surgical patients in effort to increase patient empowerment and engagement in their health and healthcare by increasing their self-management ability.

METHODOLOGY
Self-determination theory (SDT) was the theoretical framework used to guide the development, implementation, and evaluation of the project. SDT emphasizes human motivation and focuses on the extent to which behavior is self-motivated and self-determined. SDT offers a lens for understanding how motivation influences human behavior. According to SDT, the concepts of competence, relatedness, and autonomy make up the three innate psychological needs that must be satisfied for humans to achieve optimal function. These human needs are seen as universal requisites for actualizing human potential and are fundamental in activating patients to engage in their care.

During the pre-surgical phase of care, adult day-surgery patients received motivational interviewing with coaching and goal-setting, a patient activation measure (PAM®) survey, and education of the MyChart® electronic resource. Each participant received a
post-discharge follow-up interview to assess satisfaction of the pre-surgical encounter, cheer successes, problem solve, or both.

**RESULTS**
Forty adult surgical patients participated in pre-surgical and post-surgical interviews. Within the four activation levels on the PAM® survey, a majority of participants endorsed the two highest levels of activation (level 3, 40%; level 4, 22.5%), while 15 participants (37.5%) measured at the lowest activation levels of 1 and 2, neither believing that taking an active role was important nor having the knowledge, skills, and confidence to effectively manage their health and health care. Twenty-two participants (55%) indicated utilization of the MyChart® mobile app resource for some aspect in self-managing their healthcare (provider questions, lab results, medication refills, appointment scheduling). Thirty-one participants (78%) reported confidence in their self-management capability for monitoring and identifying surgery-related complications. Five patients (12.5%) reported experiencing post-surgical complications, and 1 patient was re-admitted for additional treatment and monitoring. All 5 patients self-initiated a correspondence to their provider, indicating an ability to effectively self-advocate and utilize available resources. Thirty-four participants (85%) reported extreme satisfaction with pre-surgical motivational interviewing, goal setting, and pre-operative education. The highest activated patients were 3 times more likely to be satisfied with their surgical experience.

**IMPLICATIONS FOR PRACTICE**
Project findings suggest the level of patient activation correlates positively to self-management competence in post-operative care. Patient-activating nurse behaviors in the pre-operative setting lead to improved patient engagement and empowerment. Specifically, motivational interviewing, pre-operative patient education, and individualized goal setting facilitated the acquisition of knowledge and skills, and further cultivated self-confidence, which are foundational requisites for effectively self-advocating for care needs and resources. Evaluation of project outcomes indicates patient-activating interventions in the pre-surgical setting is both feasible and efficacious at increasing patient activation and improving post-operative patient satisfaction and surgical outcomes. Implications of the DNP project include the potential to recruit patients as engaged care partners and improve operative outcomes through the integration of activation science within existing care delivery models.

*Keywords*: activation, engagement, empowerment, surgery

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