

Patient education

▶ Intervention in brief

<p>System wide:</p>	<p>Patient education is the part of treatment when patients are informed about their health status and care plan in a culturally competent manner. Education often includes tactics such as teach-back or pictorial educational materials. The goal is to drive patient health engagement, adherence to care plans, and positive clinical outcomes.</p>
<p>Strength of evidence</p>	 <p>High</p>
<p>Impact</p>	<ul style="list-style-type: none"> • Decreased cost: Not demonstrated • Decreased utilization (wide range): Insignificant change to 80% decrease in ED use; 63% decrease in admissions; 2.6-6.2 percentage point decreased readmission rate; 20% absolute reduction in post-acute care utilization; insignificant to 6 percentage point decreased reoperations • Improved quality, clinical outcomes: Increased knowledge of disease; better controlled disease; 82% decline of blood pressure scores; 94% correct responses on clinical knowledge assessment; 90% correct responses on behavior change assessment • Increased access: Not demonstrated • Improved stakeholder satisfaction: 3-point increased patient satisfaction on 100-point OAS CAHPS¹
<p>How to succeed</p>	<p>To succeed with patient education:</p> <ul style="list-style-type: none"> • Centralize education efforts to reduce duplication and conflicting messages to patients • Determine scope of health education offered to manage time constraints, leaning on the entire care team for education delivery • Encourage patient recall by using tactics like teach-back regularly across all staff types • Tailor written and visual educational materials to patients based on health literacy levels, emphasizing self-management skills rather than clinical facts • Drive efficiency with group visit models using trained peer educators • Extend patient engagement into the home with remote monitoring or telehealth initiatives <p>To learn more about developing an evidence-based approach, check out our Four Tactics to Maximize the ROI of Your Patient Education Program brief here.</p>

1) Outpatient and Ambulatory Surgery Consumer Assessment of Healthcare Providers and Systems.

Source: Population Health Advisor research and analysis.

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▶ Demonstrated impact

Literature review summary

Title: Non–Emergency Department Interventions to Reduce ED Utilization: A Systematic Review

Publication: Academy of Emergency Medicine

Date: 2013

Type: Systematic review

Study population: Patients across the five studies analyzed were assessed at an Air Force base, in an urban setting under two Medicaid health plans, at primary care practices of an academic health center, at multiple home health nursing agencies, and at primary health care centers.

Major findings: Of five studies analyzing patient education programs, only two found reductions in ED utilization (21-80%).

Source: Full article [here](#).

Title: Reducing Readmissions Using Teach-Back: Enhancing Patient and Family Education

Publication: The Journal of Nursing Administration

Date: 2015

Type: Case study

Study population: 200 patients with heart failure admitted to a tertiary Magnet facility between January and June 2010

Major findings:

- Patients receiving teach-back as part of their education were 50% less likely to readmit within a year than those receiving education without teach-back (28.2% to 14%).
- Patients showed improved understanding after teach-back, with an average of 94% correct responses for clinical knowledge questions and 90% for behavior change questions.

Source: Full article [here](#).

Title: Community-Based Asthma Education

Publication: American Journal of Managed Care

Date: 2017

Type: Case study

Study population: On average, 574 patients were 30 years old, female (61%), covered by either Medicare or Medicaid (72%), and self-selected into Ellis Hospital's asthma education program

Major findings: The community-based program connects referred patients to a Certified Asthma Educator who provides up to 10 hours of instruction. The program resulted in:

- Decreased ED visits: 64%
- Decreased admissions: 63%
- Increased asthma knowledge: 3 points on asthma knowledge questionnaires
- Better controlled asthma: 5 points higher on the Asthma Control Test

Source: Full article [here](#).

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Title: Improving Value in Total Joint Arthroplasty: A Comprehensive Patient Education and Management Program Decreases Discharge to Post-Acute Care Facilities and Post-Operative Complications

Publication: Journal of Arthroplasty

Date: 2017

Type: Cohort study

Study population: 927 patients who underwent total joint arthroplasty before and after implementing a patient education program

Major findings:

- Reduced 30-day readmissions (5.6% before vs. 3.0% after)
- Reduced 90-day readmissions (15.9% before vs. 9.7% after)
- Reduced post-acute care utilization (59% relative reduction; 20% absolute reduction)
- Insignificant impact on 30-day reoperations
- Fewer 90-day reoperations (13% before vs. 7% after)

Source: Full article [here](#).

Title: A Pre-Hospital Patient Education Program Improves Outcomes of Bariatric Surgery

Publication: Obesity Surgery

Date: 2016

Type: Randomized controlled trial

Study population: 229 patients participating in a pre-surgery education program at the Alfred Health bariatric surgery clinic

Major findings: Greater weight loss than the control group (20.3% vs. 18%) at 12 months post-surgery

Source: Full article [here](#).

Title: Setting the Foundation for Patient-Care Team Communication

Publication: Advisory Board

Date: 2017

Type: Case study

Study population: Older adults with hypertension participating in the Personal Education Program at the University of Connecticut Health Center

Major findings: Decrease in blood pressure scores 82% of the time

Source: Full article [here](#).

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Title: Web-Based Education Prior to Outpatient Orthopaedic Surgery Enhances Early Patient Satisfaction Scores

Publication: Orthopaedic Journal of Sports Medicine

Date: 2018

Type: Randomized controlled trial

Study population: 177 patients who underwent knee arthroscopy with meniscectomy, chondroplasty, or anterior cruciate ligament reconstruction or shoulder arthroscopy with rotator cuff repair with and without interactive web-based education tool

Major findings: Web-based education was delivered through the platform HealthLoop and included preoperative instructions (e.g., do not eat or drink after midnight), postoperative instructions (e.g., exercise reminders), and educational videos. Compared to the control group, patients receiving web-based education experienced:

- Increased patient satisfaction (97 vs. 94 score on overall Outpatient and Ambulatory Surgery Consumer Assessment of Healthcare Providers and Systems; normalized to 100-point scale), including:
 - Increased recovery core measure (92 vs. 82)
 - Insignificant impact on preoperative education, facility and staff, communication, and overall experience core measures

Source: Full article [here](#).

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Appendix

- Morgan SR, et al., “Non–Emergency Department Interventions to Reduce ED Utilization: A Systematic Review,” *Academy of Emergency Medicine*, 20, no. 10 (2013): 969-85, <https://www.ncbi.nlm.nih.gov/pubmed/24127700>.
- Peter D, et al., “Reducing Readmissions Using Teach-Back: Enhancing Patient and Family Education,” *The Journal of Nursing Administration*, 45, no. 1 (2015): 35-42, <https://www.ncbi.nlm.nih.gov/pubmed/25479173>
- Rau Murthy R, et al., “Community-Based Asthma Education,” *American Journal of Managed Care*, 23, no. 2 (2017): e67-e69, <https://www.ncbi.nlm.nih.gov/pubmed/28245658>.
- Brown W, et al., “A Pre-Hospital Patient Education Program Improves Outcomes of Bariatric Surgery,” *Obesity Surgery*, 26, no. 9 (2016): 2074-2081, <https://www.ncbi.nlm.nih.gov/pubmed/26852397>.
- “Setting the Foundation for Patient-Care Team Communication,” Population Health Advisor, Advisory Board, <https://www.advisory.com/research/population-health-advisor/events/webconferences/2017/how-to-engage-patients-101>.