

The Role of Industry in Improving Patient Outcomes in IHS

Background

The transition patients make from a hospital or integrated health system to their homes or long-term care facilities should be smooth and seamless. However, this experience increasingly has become problematic for many patients and caregivers. Operational and logistical concerns—such as incomplete discharge summaries and lack of coordination among hospitals, primary care physicians, specialists, and tertiary care facilities—continue to compromise patient safety and result in sub-standard care.¹ While some of these issues can be attributed to government complexities and the prioritizing of cost-efficiency measures by healthcare systems, many stem from improper communication between healthcare providers (HCPs) and their patients and caregivers. Multiple studies have noted that, upon discharge, patients receive little information on how to care for themselves, when to resume regular activities, how to take their medicine or identify its side effects, or how to find answers to questions.²⁻⁴ Not surprisingly, this improper continuity of care greatly increases the risk for medication-related adverse events and product complaints.⁵

BY THE NUMBERS:



>30%

of patients readmitted to a hospital for a chronic condition were there because of medication non-adherence⁶



\$25-45 BILLION

is the estimated amount of wasteful spending from avoidable complications and unnecessary hospital readmissions⁷



15-45%

of hospitalized patients experience medication problems after discharge³



~20%

of fee-for-service Medicare beneficiaries discharged from the hospital are readmitted within 30 days²

Care Coordination and Care Transitioning

While the government and other payor organizations have focused mostly on financial incentives and penalties for inciting change, the health system industry is making advancements through operational initiatives that leverage its greatest asset—its employees. Many health systems have improved care coordination and the nursing staff responsible for designing, implementing, and assessing such programs by recognizing the importance of the role of the nurse in care coordination, adding nurse practitioners into discharge planning to communicate plans, conduct post operative visits, and provide ongoing follow-up calls to patients and caregivers. Multiple studies have addressed these recent changes and how they play a central role in improving patient outcomes and cost efficiencies. As it turns out, these improvements have resulted in emergency department visit reductions, fewer readmissions, increased patient confidence for self-managing care, reduced inpatient charges, better quality of care, and overall greater patient satisfaction.⁷

Care transitions, a component of care coordination that refers to the processes and protocols of moving patients from one care setting to another, have been a chief focus of improvement.⁸ The American Geriatrics Society explains that proper training and education of both hospital staff and patients is being recognized increasingly as the primary requisite for successful transitional care. It states, “*transitional care is based on a comprehensive plan of care and the availability of healthcare practitioners who are **well trained** in chronic care and have current information about the patient’s goals, preferences, and clinical status. It should include logistical arrangements, **education of the patient and family**, and coordination among the health professionals involved in the transition.*”⁹

CARE COORDINATION IMPROVEMENT OUTCOMES



64% INCREASE in calls initiated and received by Nurse Practitioner facilities



52% REDUCTION in emergency department visits



40% REDUCTION in overall re-hospitalization costs

The Role of Industry: HCP and Patient Education

Industry also can play a role in supporting patient transitions to ensure the safe use of prescribed products and comprehensive therapy management. Education initiatives could include structured interventions, such as peer-to-peer administration training for hospital nurses and patient discharge product education programs. Patient-centered educational engagements also have been shown to increase initiation of and adherence to a range of treatments, including self-injection medications for osteoporosis, diabetes, and rheumatoid arthritis.¹⁰⁻¹² Through a structured dialogue, a shared understanding between patient and provider regarding the expectations, limitations, and projected outcomes of treatment can be developed.¹³ Most importantly, these conversations can help patients can gain acceptance of their conditions and understand the rationale of the required therapies. Only after a patient has accepted the “why” for treatment can behaviors change and the barriers that slow or impede progress be addressed.¹⁴

Education programs especially are popular among pharmaceutical companies that manufacture biologics to treat chronic conditions and medications with severe side-effect profiles, such as self-administered cancer medications like oral oncolytics.¹⁵ The growing popularity of these pharmaceutical-sponsored education programs largely is due to patient dissatisfaction regarding the length and type of communication they receive from their primary healthcare teams regarding their prescribed therapies.¹⁶⁻¹⁸ For instance, many patients perceive the quality of time spent teaching to be as important to their satisfaction as the quantity of time in interpersonal engagement.^{16,17,19} Additionally, studies have shown that patients prefer, and tend to benefit more from, information delivered in smaller chunks as part of a continuous process, instead of overwhelming amounts of information presented in a single occurrence.^{20,21} Pharmaceutical-based Clinical Educator programs are proving to meet some of these needs.

Case Examples for Pharmaceutical and Device-sponsored Education

Safe Injection Training for Healthcare Providers in Hospitals

Over the last 10 years, improper use of insulin pens by hospital staff has exposed thousands of patients to potential bloodborne pathogens, resulting also in enormous costs for those health systems to notify and test patients. Twice, the Institute for Safe Medication Practices (ISMP) issued medication safety alerts about the improper use of insulin pens by hospital staff who mistakenly reused pens on multiple patients. The ISMP recommended that hospitals “should closely re-examine the safe use” of insulin pen devices.²²

VMS BioMarketing has partnered with industry to provide Clinical Educators to deliver education and training to ensure the correct usage of insulin delivery devices by HCPs and prevent insulin administration errors.

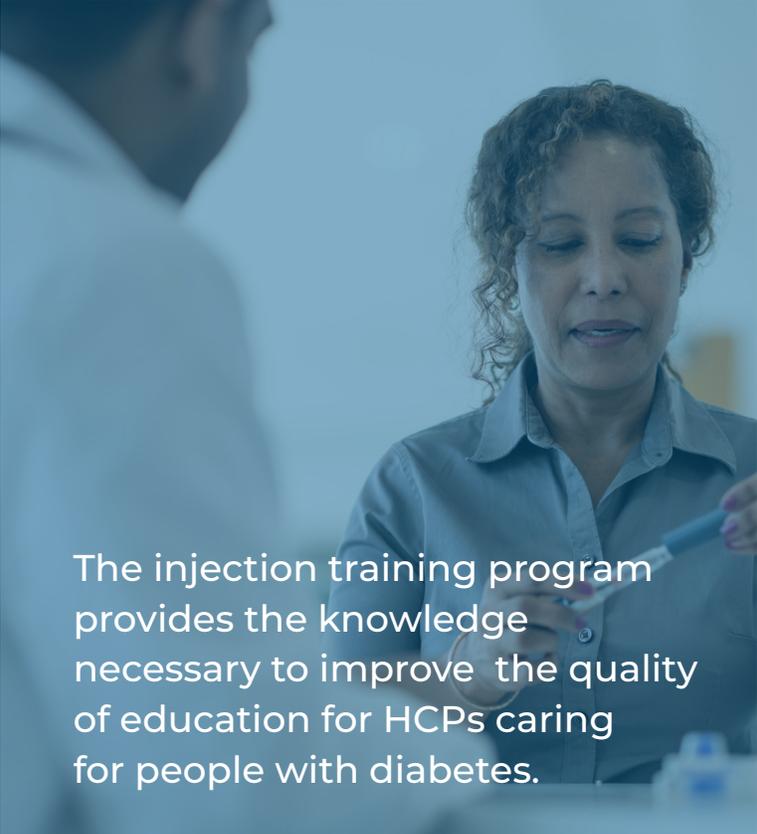
SAFE INJECTION OUTCOMES

Self-Injection Training for Healthcare Providers²⁵

 **98%** of participants believe the program will improve safety practices at their facilities

 More than **100,000** HCPs trained

 **97%** of HCPs felt the training session helped better prepare them for the facility's transition to insulin



The injection training program provides the knowledge necessary to improve the quality of education for HCPs caring for people with diabetes.

Specifically, VMS recruited and trained an expert team of 40 Diabetes Clinical Educators to provide injection training and education to hospital staff. The approach includes product education for both inpatient and discharge modules based on the needs of each facility. Receiving a 98% satisfaction rating, the injection training program provides the knowledge necessary to improve quality of education for HCPs caring for people with diabetes in a variety of institutional settings, large or small.

Patient Discharge Education

Care transition and patient discharge programs also have been effective in improving the quality of patient care. The objectives of a current VMS patient discharge program are threefold: 1) ensure patients who have been prescribed the medication by their doctor have the product knowledge necessary to start therapy after discharge from the hospital; 2) educate patients to take control of their therapies when starting their medications, thereby reducing the chances of readmission; and 3) engage patients during key touch points to better understand their diseases and the therapies prescribed by their doctors. Patients who enrolled in the program are assigned a Clinical Educator—who contacts the patient by phone and provides education within 48 hours of discharge. Additionally, the Diabetes Educator helps the patient set and track health goals to support self management.

Technology-based Transition Approaches

Meanwhile, pharma-sponsored transition programs are leveraging the use of technology to help reduce readmission rates, as well. For instance, former Merck & Co.'s subsidiary Vree Health (later sold to Patient Safe Solutions) created TransitionAdvantage™, a program designed specifically to reduce preventable

PROGRAM OUTCOMES

Discharge Education for Patients²⁵



96% of participants felt the program will enhance the overall quality of their discharge process



66 total participating facilities



~1100 patients educated

30-day readmission rates for patients hospitalized with heart attacks, heart failure or pneumonia. Through a combination of high-touch human interaction with mobile and web technology, the program hoped to increase post-discharge adherence behaviors. It focused on four identified transition gaps that can impact non-adherence and increase the risk of readmission. These included incomplete patient handoff and visibility with patients' private physicians, lack of follow-up, medication management issues, and lack of care coordination after discharge. The program comprised three components: a transition liaison, a 24/7 nurse hotline, and a cloud-based dynamic electronic patient profile system accessible to the patient, provider, and caregivers via web and mobile applications.^{23,24}

There is a growing need for educational support programs and services that can ease a patient's transition from a hospital to their home or long-term care facility. Industry should play a role, especially as it relates to the safe use of prescribed products and comprehensive therapy management. Clinical Educators can meet this need by serving both patients and their peer healthcare providers within integrated healthcare systems.



 **vms** BioMarketing is a leading provider of Clinical Educator solutions focused on empowering healthcare providers and patients through education, training and ongoing health coaching. For more than 20 years, VMS has been dedicated to enabling Clinical Educators to provide the personalized support necessary to help patients successfully start and stay on therapy.

Our deep expertise in delivering Clinical Educator services on a national scale allows us to attract and retain the best in the market and deliver the highest quality engagement with patients and healthcare professionals. Global biopharmaceutical and medical device manufacturers select VMS to address unmet needs and improve outcomes.



Ready to learn more about VMS? Call 317.805.6600 or visit vmsbiomarketing.com.

References

1. Toscan J, Mairs K, Hinton S, Stolee P, The InfoRehab Research Team. Integrated transitional care: patient, informal caregiver and health care provider perspectives on care transitions for older persons with hip fracture. *International Journal of Integrated Care*. 2012;12:1-14.
2. Burton R. Health policy brief: care transitions. Health Affairs. September 2012. https://www.healthaffairs.org/doi/10.1377/hpb20120913.327236/full/healthpolicybrief_76.pdf. Accessed December 20, 2017.
3. Peikes D, Lester RS, Gilman B, Brown R. The effects of transitional care models on re-admissions: A review of the current evidence. *Generations*. 2012;36(4):44-55.
4. Jack BW, Chetty V, Anthony D, et al. A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. *Annals of Internal Medicine*. 2009;150(3):178. doi:10.7326/0003-4819-150-3-200902030-00007.
5. Altfeld SJ, Shier GE, Rooney M, et al. Effects of an Enhanced Discharge Planning Intervention for Hospitalized Older Adults: A Randomized Trial. *The Gerontologist*. 2013;53(3):430-440. doi:10.1093/geront/gns109.
6. Lam WY, Fresco P. Medication adherence measures: An overview. *BioMed Research International*. 2015;2015:1-12. doi:10.1155/2015/217047.
7. Camicia M, Chamberlain B, Finnie RR, et al. The value of nursing care coordination: a white paper of the American Nurses Association. *Nurs Outlook*. 2013;61(6):490-501.
8. Golden R, Shier G. What does "care transitions" really mean? *Generations*. 2012;36(4):6-12.
9. Coleman EA, Boult C, American Geriatrics Society Health Care Systems Committee. Improving the quality of transitional care for persons with complex care needs. *J Am Geriatr Soc*. 2003;51(4):556-557.

References (continued)

10. Briot K, Ravaud P, Dargent-Molina P, Zylberman M, Liu-Leage S, Roux C. Persistence with teriparatide in postmenopausal osteoporosis; impact of a patient education and follow-up program: the French experience. *Osteoporosis International*. 2009;20(4):625-630. doi:10.1007/s00198-008-0698-8.
11. Lorenzi GM, LaRue SM, Collins SE. Effects of a patient education support program on pramlintide adherence. *Clinical Diabetes*. 2011;29(1):17-24. doi:10.2337/diaclin.29.1.17.
12. Stockl KM, Shin JS, Lew HC, et al. Outcomes of a rheumatoid arthritis disease therapy management program focusing on medication adherence. *Journal of Managed Care Pharmacy*. 2010;16(8):593-604. doi:10.18553/jmcp.2010.16.8.593.
13. Lindeman C. Patient education. In: Funk SG, Tornquist EM, Champagne MT, Wiese RA, eds. *Key Aspects of Caring for the Acutely Ill: Technological Aspects, Patient Education, and Quality of Life*. New York: Springer; 1995:34-43.
14. Street RL, Makoul G, Arora NK, Epstein RM. How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Education and Counseling*. 2009;74(3):295-301. doi:10.1016/j.pec.2008.11.015.
15. Rossheim J. Big pharma recruits nurses to fill patient-educator roles. Monster. 2016. <http://www.monster.com/career-advice/article/big-pharma-recruiting-nurses>. Accessed December 20, 2017.
16. Alexander JA, Hearld LR, Mittler JN, Harvey J. Patient-physician role relationships and patient activation among individuals with chronic illness. *Health Services Research*. 2012;47(3pt1):1201-1223. doi:10.1111/j.1475-6773.2011.01354.x.
17. Bartlett EE, Grayson M, Barker R, Levine DM, Golden A, Libber S. The effects of physician communications skills on patient satisfaction; Recall, and adherence. *Journal of Chronic Diseases*. 1984;37(9-10):755-764. doi:10.1016/0021-9681(84)90044-4.
18. National Council on Patient Information and Education. *Enhancing Prescription Medication Adherence: A National Action Plan*. Rockville, MD: National Council on Patient Information and Education; 2007. http://www.talkaboutrx.org/documents/enhancing_prescription_medicine_adherence.pdf. Accessed May 7, 2017.
19. Braddock CH, Snyder L. The doctor will see you shortly. The ethical significance of time for the patient-physician relationship. *J Gen Intern Med*. 2005;20(11):1057-1062. doi:10.1111/j.1525-1497.2005.00217.x.
20. Hashim MJ. Patient-centered communication: Basic skills. *Am Fam Physician*. 2017;95(1):29-34.
21. Wikblad K. Patient perspectives of diabetes care and education. *Journal of Advanced Nursing*. 1991;16(7):837-844.
22. Institute For Safe Medication Practices. A crack in our best armor: "Wrong patient" insulin pen injections alarmingly frequent even with barcode scanning. Institute For Safe Medication Practices. <https://www.ismp.org/resources/crack-our-best-armor-wrong-patient-insulin-pen-injections-alarmingly-frequent-even>. Accessed September 27, 2018.
23. Vree Health. Vree Health Launches TransitionAdvantage™ To Help Hospitals Reduce Readmissions. PR Newswire. <https://www.prnewswire.com/vree-health-launches-transitionadvantage-to-help-hospitals-reduce-readmissions-170312916>. Published September 19, 2012. Accessed November 1, 2018.
24. Robertson A. Vree Health: Reduce Readmissions with Patient Engagement | eyeforpharma. eyeforpharma. <https://social.eyeforpharma.com/content/vree-health-reduce-readmissions-patient-engagement>. Published February 26, 2014. Accessed November 1, 2018.
25. VMS. data on file.