

Innovation Profile

Ethnographically Designed Patient Self-Management Kits

Designing patient self-management materials using an ethnographically-based understanding of patients' needs reduces readmissions and the need for other health care services. One study demonstrated a 39% drop in 90-day readmissions for a group of heart failure patients who were discharged from the hospital with an ethnographically-designed kit.

Application Profiled Here: Care Kit for Heart Failure



What it is

Care Kits are condition-specific instruction books in loose-leaf binders that give detailed instructions in patient self-management. Packaged with the books are tools and devices used in self-management and monitoring. The distinguishing feature of the Care Kits is that materials are developed, designed and written by medical anthropologists and linguists based on ethnographic studies of how patients view their condition, treatment and self-management tasks.¹

Summary	
Application Profiled: Care Kits for HF	
Category	Documented, Focused
Savings	●● Level 1
Access	●●
Experience	●●
Engagement	●●
Outcomes	NR
Barriers	
Reimbursement	●
Investment	\$ to \$\$
Training	Moderate
EMR Integration	Favorable
Potential for Spread	●●
User Sites	30-40 hospitals, 40 home care companies



Problems addressed

- Patients often are unable or unmotivated to follow self-management instructions because they do not understand their conditions and the reasons for the prescribed self-management.
- Patients may receive only verbal instructions in self-management or instructions written in terms that they find difficult to understand.
- Patients may not have basic aids and devices (scales, thermometers) at home that are necessary in order to manage their condition.



How it works

Care Kits are given to patients by nurses or home health workers who also train the patients in use of the kit. Payers may send Care Kits direct-to-home for self-management and transition-of-care management. Care Kits are available for more than 33 conditions including heart failure, diabetes and asthma.

Savings are achieved by improving patients' self-management skills and thereby reducing exacerbations and complications that require utilization of expensive health care services.



Innovators

Communications Science, Inc. founded 1989, Buffalo Grove, Illinois. There are more than 33 condition-specific Care Kits. Many are applicable to chronic conditions such as COPD, asthma, coronary artery disease and diabetes. Care Kits are also available for post-discharge patients recovering from breast surgery, joint replacement, prostate surgery, and pneumonia. Kits are also available to support patients for weight management, depression, and smoking cessation as well as for co-morbid conditions such as combined CHF, diabetes, and hypertension.



Complexity (How complex are the organizational requirements)

Focused. Care Kits are purchased directly from Communications Sciences. Purchase prices for the HF kits range from \$40 to \$120, depending on the version of the kit purchased and whether it includes equipment such as a scale. Care Kits for other conditions fall within similar pricing ranges. Care Kits may be purchased in standard form or a provider may request adjustments based on the provider's treatment approach. Some kits are available in Spanish as well as English. Other languages are available upon request.

A provider adopting Care Kits should dedicate some staff time to training clinicians or aides in the use of the kits and in explaining their use to patients. Communication Science provides this training. For the VA pilot of the Heart Failure Care Kit, a single instruction session of less than one-hour duration was given to nurses who would be training patients in Care Kit use.²



Savings

Yes. A randomized study found that for heart failure patients who received a Care Kit before being discharged from a VA Medical Center, a **39% drop in 90-day readmissions**³ and a cost savings of ~ **\$870 / CHF patient** (these were net savings of fees for kits) was achieved.

The VA reported roughly 22,000 CHF patient readmissions in 2009.⁴ If all of these patients were eligible for Care Kits and had been given the kits at discharge, and the same reduction in readmissions applied, then the VA would have seen an average 39% drop in 90-day readmissions⁵ and avoided roughly 8,500 CHF readmissions.⁶

In most cases the hospital realizes indirect savings by reducing rates of uncovered readmissions.



Access

Yes. Care Kits offer patients increased access to training and tools for self-management, which in this example included a scale for easy monitoring of weight gain, a sign of CHF complications.



Patient experience

Yes. Patients reported that the CHF Care Kit was useful to them.



Engagement

Yes. Patients reported that the CHF Care Kit helped them adopt new behaviors, such as organizing medications (68%), weighing daily (52%), and keeping a diary (36%).⁷



Outcomes

Likely improved, but no information was available directly measuring impact on patient clinical or patient-reported outcomes. The VA study of the CHF Care Kits did not assess patient-reported functioning status or clinical outcomes. However, the reported lower readmission rate for patients who received Care Kits suggests that they helped patients achieve improved functioning and increased clinical status compare to a control group.⁸



Spread

Care Kits for Heart Failure are used in several VA hospitals. Other hospitals reportedly using Care Kits for Heart Failure include **St. Joseph Hospital**, Lexington, KY; **University of Pittsburgh Medical Center**; and **Mainline Health** in Philadelphia and Bryn Mar, Pennsylvania.

Other providers use Care Kits for additional conditions. Communications Sciences estimates that roughly 30-40 hospitals use Care Kits for various conditions, while some payers provide kits to enrollees. They also report that approximately 40 home care companies dispense the kits.⁹



Barriers and Drivers

Barriers

Reimbursement: Neither the Care Kit itself nor the nurse's time for the training on how to use the Care Kit (very minimal) are currently covered by payers.

Drivers

Financial Penalties: Payer-imposed penalties for hospital readmissions within 30 days of discharge. Capitated delivery systems have financial incentives to use tools such as Care Kits that encourage effective patient self-management.



Similar innovations

None Found. No other pre-packaged patient training tools developed with medical anthropological studies were found.



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Endnotes

- 1 Ethnographic research in health care had been described as “a social research method occurring in natural settings characterized by learning the culture of the group under study and experiencing their way of life before attempting to derive explanations of their attitudes or behavior. The culturally based approach can be related to ethnicity, nationality, gender, regional origin, occupation, generation, or in healthcare the focus might be a particular pathology such as cancer, HIV, heart disease, or diabetes. Ethnographies are normally conducted in a single setting, and data collection is largely dependent upon participant observation and interviews.” Goodson, L, An Overview of Ethnography in Health Care and Medical Education, *J of Ed Evaluative Research*, 2011.
- 2 Interview with Michael Weiss, President, Communication Sciences, February, 2014.
- 3 Herm, Ann, et. al., “Heart Failure Self-Management Project, A Case Study Using Ethnographically-Prepared Patient Materials,” <http://www.carekit.com/vaheartstudy.html> There were no intervention differences between study arms other than nurse training of patients in use of Care Kit (CK) and providing Care Kits to the treatment arm patients to take home upon discharge.
- 4 Treating Chronic Heart Failure, Management Decision & Research Center, Dept. VAHS Research and Development, February 2009.
- 5 Some hospitalized CHF patients are not eligible for CKs because they are discharged not to home but to a SNF, LTACH, or other residential setting. In the pilot study morbidly obese patients were excluded because they would not be able to use the scale that was part of the Care Kit version used in the study.
- 6 This assumes that all 22,000 reported VA HF readmissions were readmission from home and, therefore eligible to receive Care Kits upon discharge. To the extent that some readmissions were patients not eligible for Care Kits, the potential readmissions avoided would be lower.
- 7 Herm, op. cit.
- 8 Herm, op. cit.
- 9 The providers reportedly using CKs are as follows: Hospitals: 20-30. Including Kaiser facilities, Mainline, Univ of Chicago, OU Medical Center, several Advocate locations. Payers / Self-Insured / ACOs / Integrated Networks are reported as including: Univ of Pitt Med Ctr, WellPortal Las Vegas, UnitedHealth, GEHA (new 2014, Palmetto ACO in SC.) Home Care firms are estimated as “roughly 40 companies, which represents probably 100 locations.” The home care firms using CKs include: Team Select Colorado, Medical Services of America, and Infinity Homecare. Communication by e-mail with Michael Weiss, President of Communications Sciences, February, 2014.