



ELSEVIER

Contents lists available at ScienceDirect

Healthcare

journal homepage: www.elsevier.com/locate/hjdsi

Into Practice

Case study: Delivery and payment reform in congestive heart failure at two large academic centers

Meaghan George, Sara Bencic, Sarah Bleiberg, Nawara Alawa, Darshak Sanghavi*

The Brookings Institution, 1775 Massachusetts Ave NW, Washington, DC 20036, USA

ARTICLE INFO

Article history:

Received 13 April 2014

Accepted 13 April 2014

Keywords:

Health policy

Congestive heart failure

Medicare

Health reform

Payment reform

Accountable care organizations

Bundled Payment

Chronic disease

ABSTRACT

To help support implementation of aligning clinical redesign with payment reforms in practices and institutions throughout the country, we present two cases from Duke University Health System (“Duke”) and University of Colorado Hospital (“Colorado”). The studies provide practical solutions for not only implementing clinical redesign, but also an understanding of how those clinical innovations can be aligned with alternative payment models. The cases will explore the following questions: What challenges or problems encouraged the organization to redesign CHF care? How did the organization select and then align care innovations with payment reforms, including bundled payments and shared savings? What did the organization identify as key success factors and/or challenges? How did these changes impact the organization’s clinical outcomes or financial position? Finally, what lessons would the organization share with others attempting to implement similar strategies?

© 2014 Elsevier Inc. All rights reserved.

1. Background

To help support implementation of aligning clinical redesign with payment reforms in practices and institutions throughout the country, we present two cases from Duke University Health System (“Duke”) and University of Colorado Hospital (“Colorado”). The studies provide practical solutions for not only implementing clinical redesign, but also an understanding of how those clinical innovations can be aligned with alternative payment models. The cases will explore the following questions: What challenges or problems encouraged the organization to redesign CHF care? How did the organization select and then align care innovations with payment reforms, including bundled payments and shared savings? What did the organization identify as key success factors and/or challenges? How did these changes impact the organization’s clinical outcomes or financial position? Finally, what lessons would the organization share with others attempting to implement similar strategies?

1.1. Personal content

Living in the small southern town of Bristol, Tennessee at the age of 86, Robert Neelley Church takes deep pride in living an active life, especially after surviving a skin cancer diagnosis. But recently, Robert’s health began to trouble him again. He developed chest pains and had difficulty breathing, putting a damper on his

active lifestyle and routine activities. After consulting with his primary care physician, Robert was referred to a cardiologist to take a deeper look at his symptoms. After a few tests, Robert’s cardiologist diagnosed him with mild congestive heart failure (CHF). After discussions with his physician and nurse about treatment and recovery options, Robert chose to have open heart surgery.

After surgery, Robert continued to experience persistent shortness of breath, even during mild physical exertion. A sudden worsening of symptoms almost took Robert to the emergency room, but instead his family encouraged him to go to the Duke University Health System’s Same Day Access Heart Failure Clinic. While at the clinic, Robert met with his cardiologist, Dr. Zubin Eapen, and two nurses. Dr. Eapen spent time with Robert to help him understand what was happening to his heart and the rest of his body, and explained how additional treatments and behavior changes could help ease his symptoms.

A few days after their visits, Robert and his family were happy to see that his discomfort eased and his symptoms dissipated. But to this day, Robert and his friends and family play a significant role in managing and treating his chronic and challenging condition. Robert’s story is just one of millions of Americans living with CHF in the United States.

2. Problem

In this section, we will explore CHF’s clinical background.

* Corresponding author. Tel.: +1 202 797 6248.

E-mail address: dsanghavi@brookings.edu (D. Sanghavi).

2.1. Physiology and symptoms

The average human heart beats four million times per year and pumps enough blood to fill a modern oil supertanker during a lifetime. However, over time some individuals may experience damage to cardiac muscles for a variety of reasons, such as plaque buildup in the arteries, heart attacks, or infections. This condition is known as congestive heart failure, a chronic disease with alternating periods of worsening and stability, with minimal recovery. Half of patients with CHF will die within five years of their diagnosis.¹ Treatment often includes a number of medications and lifestyle modifications such as reduced sodium intake and daily physical activity. This unpredictable nature and variation in severity of symptoms significantly impacts the patient's use of health care services, the intensity of their care, and can often contribute to preventable hospital readmissions and mortality rates.

2.2. Epidemiology

CHF prevalence is highest in older patients, who make up a growing portion of the population (one in 5 Americans will be older than 65 years of age by 2050). Of all patients hospitalized with CHF, 75 percent are over the age of 65, and half are over 75. According to the American Heart Association, nearly 6 million Americans suffer from CHF, and an additional 555,000 are diagnosed each year. This chronic condition accounts for one million hospitalizations in the U.S. annually, is the leading cause of hospitalization among adults over the age of 65.² CHF accounts for a staggering 17 percent of overall national health expenditures, \$273 billion in direct medical costs, and \$172 billion in indirect costs.³

Many CHF patients also suffer from multiple illnesses or comorbidities, often adding to the intensity of their care and treatment. Studies have shown that nearly 40 percent of CHF patients have five or more non-cardiac comorbidities, and account for 81 percent of the total CHF inpatient days.⁴ This added complexity of multiple diseases has major implications for providers, patients, and their caregivers and families that need to support them in their daily lives.

3. Solution

3.1. Optimizing CHF care: prevent, manage and stabilize

Clinical approaches to chronic disease management benefit from a three-pronged approach that addresses (1) patient

behavior; (2) physician or practice-level clinical interventions; and (3) public policy or population health strategies (Fig. 1.)

3.2. Payment reform

3.2.1. Medicare readmission reduction program

In 2012 through the Affordable Care Act, Medicare began the Hospital Readmission Reduction Program, which levied penalties to hospitals with higher-than-expected rates of 30-day readmission after discharge.⁵

A hospital with a high proportion of patients readmitted within a short time frame could be an indication of poor quality of care in the hospital or a lack of appropriate coordination of post discharge care.⁶ It could also be an indication, particularly in an academic medical center setting, of a lesser opportunity to reduce preventable readmissions based on a higher acuity patient population. Based on a calculation of 2012 revenues and payer mix, Duke could be at risk for penalties up to \$29 million and Colorado could face up to \$7 million (though their rates currently do not merit penalties).

3.2.2. Alternative payment models

In 2013 the Center for Medicare and Medicaid Innovation (CMMI), a component of CMS, began offering enrollment in two optional programs. The programs, Bundled Payment for Care Improvement (BPCI) Initiative and the Accountable Care Organization (ACO)/Medicare Shared Savings Program (MSSP), were attractive to Duke and Colorado. Each posed specific risks and benefits, which ultimately resulted in different choices. Overall, each organization is dedicated to linking clinical innovations to payment reforms that encouraged a value-based system – one that rewards based on quality, outcomes, and reducing inefficiencies, such as preventable readmissions – as opposed to a volume-based system that is based on number of tests, procedures, etc (Fig. 2).

4. Organizational context

4.1. Duke university health system: the path to accountable care

Duke University Health System is a nonprofit, fully integrated academic health care system comprised of Duke University School of Medicine, three hospitals, and several primary and specialty care clinics, home care, hospice, wellness centers, and community-based clinical partnerships (Fig. 3).

4.1.1. The challenge of care redesign

In the 1990s, Dr. Christopher O'Connor, a cardiologist, first explored challenges providers faced when trying to provide

Goal	Description	Sample Strategies
Modify patient behavior to reduce risk	Modify behaviors that reduce risk of CHF diagnosis or exacerbation of current symptoms	<ul style="list-style-type: none"> Aspirin, Blood pressure control, Cholesterol control, and Smoking cessation ("ABCS") Weight management and healthy eating Peer support Medication adherence
Implement physician or practice-level clinical interventions	Provide care management support in outpatient / primary care, inpatient, and post-discharge settings	<ul style="list-style-type: none"> Access to primary and subspecialty care Multi-disciplinary care team support Coordinated care transitions between inpatient and outpatient Technology to support patient monitoring and compliance
Public policies that reduce disease risk for populations	Implement meaningful public health policies that reduce environmental risk of disease	<ul style="list-style-type: none"> Anti-smoking laws in public places Calorie labeling on foods Elimination of trans-fats Construction of parks, greenways, bike paths to promote active lifestyles

Fig. 1. Three-pronged optimal care approach.

Download English Version:

<https://daneshyari.com/en/article/10354956>

Download Persian Version:

<https://daneshyari.com/article/10354956>

[Daneshyari.com](https://daneshyari.com)