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Case study: Transforming cancer care at a community oncology practice

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ABSTRACT

To assist practices and institutions throughout the country in implementing clinical redesign supported by - and aligned with - payment reform, we present a case study of the New Mexico Cancer Center (NMCC) based on numerous stakeholder interviews, literature reviews, and a comprehensive site visit. This study explores the complex barriers oncologists face in improving the quality and outcomes of cancer care and reducing overall costs in a sustainable way. This case will explore the following questions: How did the NMCC redesign care to improve quality, enhance patient experience and results, and reduce costs? How can an organization demonstrate they are improving quality to enable new payment contracts that enable sustainability? Are alternative payment models sustainable for an independent, community oncology practice?

1. Background

To assist practices and institutions throughout the country in implementing clinical redesign supported by – and aligned with – payment reform, we present a case study of the New Mexico Cancer Center (NMCC) based on numerous stakeholder interviews, literature reviews, and a comprehensive site visit. This study explores the complex barriers oncologists face in improving the quality and outcomes of cancer care and reducing overall costs in a sustainable way. This case will explore the following questions: how did the NMCC redesign care to improve quality, enhance patient experience and results, and reduce costs? How can an organization demonstrate they are improving quality to enable new payment contracts that enable sustainability? Are alternative payment models sustainable for an independent, community oncology practice?

2. Personal context

Vicky Bolton, a 58 year old fulltime medical legal coordinator from Albuquerque, has stage 4 adenocarcinoma lung cancer and started chemotherapy in 2003. Although her condition is stable, she is at high risk for venous thrombosis (blood clots), life-threatening infections, and other complications, which put her at high risk for repeated hospitalizations. Each of her providers and services – oncology, radiation therapy, labs, x-rays, and internal medicine – are centralized in a single location at NMCC, which has expanded, comprehensive after-hours care. In the past six months, she has taken advantage of this program on three occasions as an outpatient at NMCC and avoided emergency room and inpatient care. However, the lack of sustainable payment model has placed NMCC's after-hours program in jeopardy.

3. Problem

Cancer is the second leading cause of death in the U.S[1] and 41% of Americans will be diagnosed with cancer at some point during their lives. Cancer care is also expensive. In 2010 it accounted for $125 billion in health care spending and is expected to cost at least $158 billion by 2020.[2]

The high costs of cancer care are driven by issues that plague the entire health system: uncoordinated care delivery, duplication of services, and fragmentation. A common impact of these cost drivers in oncology is the use of emergency room (ER) visits for symptom relief from the adverse side effects of treatment, which often leads to hospitalization. For example, one study showed that the most common reasons for cancer patient ER admissions were pain, respiratory distress, nausea, and vomiting – more than half of the ER visits occurred on weekends or in the evening, and over 60% resulted in hospital admission.[3]

The current fee-for-service payment system further exacerbates problems. Firstly, many of the clinical reforms to provide higher-

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value care to patients at a lower cost are reimbursed poorly if at all under fee-for-service. Secondly, to the extent that the clinical reforms reduce costly complications that are reimbursed, the financial savings accrue only to the payer, not the individual practice responsible for implementing many of the reforms.

4. Catalyst for change

Dr. Barbara McAneny founded the New Mexico Cancer Center (NMCC) in 1987 and in her years working as a medical oncologist, she has been particularly frustrated by the adverse impact that fragmented care has had on her patients. Often patients are directed to up to three different locations to receive care from their oncologist, lab tests, and chemotherapy treatments. NMCC created an independent, free-standing, integrated community cancer center designed around patient needs.

5. Solution

In this study, we use a care redesign framework (Fig. 1) to consider the specific elements undertaken by NMCC as they improve quality patient-centered care at a reduced cost.

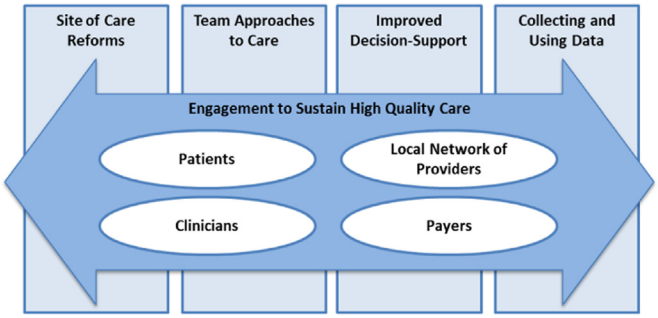

Fig. 1. Care redesign framework.

6. Care redesign strategies

Over the past 15 years, NMCC has redesigned *where* care is delivered; *who* care is delivered by; *how* care decisions are made; and the *data* used to ensure effectiveness (see Fig. 2). To make these intended transformations 'come alive', extensive engagement has been undertaken with both patients and clinicians.

6.1. Purpose built center to deliver care

NMCC bought land to build their center in 2001 and the patient perspective had an impact in all areas of buidling design and décor. The center itself is a single-story building with a parking lot right outside so that patients do not need to walk a long way to and from their treatments. The internal layout of the building has also been specifically designed to feel more like home, less like an austere, health care institution. The doctors offices are arranged in 3 'pods' with a central desk with medical assistants to support patients and clinicans, rather than one large and overwhelming office.

6.2. Provide all services in one community location

Geographic clustering of care can lead to better patient satisfaction and a reduction in unnecessary duplication of service through improved compliance with medication administration, lab testing, and follow-up. By having everything from diagnostic imaging to lab services and chemotherapy all available in one place, NMCC has created a centrally located hub for services, instead of forcing patients across multiple providers and sites of care. By providing this all in a community setting ensures that the rates paid for services are lower than they would be in a hospital inpatient or outpatient department. For example, the cost of receiving chemotherapy, per beneficiary, in a hospital was 25–47% higher than in a physician office from 2009 to 2011.[4]

6.3. Designated care coordinators in care teams

Each physician is paired with a patient care coordinator (PCC) and they share a case-load. The PCC takes all routine non-clinical work from the doctor so that they can work at the top of their license. They also work with patients and book all appointments, schedule required treatments, and arrange travel when needed.

Site of Care Reforms	Team-based care	Improved Decision-Support	Collecting and using data
▪ Purpose built center to deliver care that prevents avoidable hospitalizations and ED use ▪ Provide all services in one community location ▪ Provide easy access to routine services ▪ Expand access through after hours care	▪ Integrated team model ▪ Designated care coordinators in care teams ▪ Clinically trained administrative staff ▪ Financial counseling added to patient care regimen ▪ Coordination with local hospital	▪ Development of Triage Pathways ▪ Implement real time decision support ▪ Use of Diagnostic and Therapeutic Pathways for care	▪ Development of EHR to meet 'meaningful use' standard ▪ Integration of diagnostic and therapeutic pathways into EHR. ▪ Data collected on structural, process and outcome measures
Supported by extensive engagement and education			
Patients		**Clinicians**	
▪ Regular use of patient surveys to assess care ▪ Encouraging active disease management ▪ The NMCC Foundation, a 501(c)3 non-profit organization which help patients with their non-medical financial needs while they undergo treatment.		▪ Transparency of data ▪ Culture of continuous improvement led by senior management team ▪ Extended hours has shifted focus to patient-centeredness	

Fig. 2. Care redesign elements undertaken by NMCC.

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