

## CASE STUDY FOR QUALITY IMPROVEMENT

# A Collaborative Effort in Diabetes Care

### HOLZER CLINIC, INC.

#### Organization Profile

Holzer Clinic is a multiple-discipline health care system of over 130 Board-certified physicians providing care in 36 specialty areas and more than 1,100 employees. It is a physician-owned and operated group practice with 9 locations throughout southeastern Ohio and western West Virginia. Holzer Clinic provides service to 14 counties with an average of 500,000 outpatient visits per year. Many of the Holzer Clinic campuses include a pharmacy, lab, diagnostic testing center, surgery center, and therapy services in addition to 30+ medical specialties. Holzer Clinic is affiliated with Holzer Medical Center, a 266-bed acute care hospital in Gallipolis, OH.

#### Project Summary

Established in 2007, the Clinical Pharmacy Collaborative between Holzer Clinic (HC) and the University of Charleston, West Virginia, School of Pharmacy introduced a pharmacist as an ambulatory care provider in its treatment and management of diabetic patients. By integrating evidence-based clinical pharmacy services into the care and management of its diabetic patients, HC was able to increase patient contact, education, and understanding of their disease and how to manage it. A win-win for HC and the University, the HC became a

teaching site for fourth-year pharmacy students. In turn, increased patient adherence and satisfaction was achieved through the on-site patient care of the ambulatory care pharmacist supported by the University.

#### Goals and Objectives

The overarching objective of the program is to provide comprehensive diabetes care to all clinic patients in order to improve patient outcomes. Strategies for achieving the objective include using: a multidisciplinary team-based approach; evidence-based medicine; health information technology; and patient self-management tools. Central to the project's success is the clinic's partnering with the Charleston University School of Pharmacy to increase patient care.

## Patient Safety and Clinical Pharmacy Collaborative Goals

The Holzer Clinic team is committed to the goals of HRSA's Patient Safety and Clinical Pharmacy Services Collaborative (PSPC):

- Improve health outcomes—by focusing on implementing effective patient safety principles and clinical pharmacy services
- Improve patient safety—fewer errors, fewer injuries, less harm
- Increase high-quality, cost-effective pharmacy services—optimal utilization of clinical pharmacists and clinical pharmacy services across multiple providers of care; maximizing and enhancing medication use management

## Team Composition

- Lois Bosley, MD, Physician Champion
- Renuka Kandula, MD, Physician Champion
- Glenn Davis, MD, Physician Champion
- Rodney Stout, MD, Endocrinologist
- Doug Adkins, RN, BSN, Team Clinical Expert
- Allison Connors, JD, Quality Coordinator
- Angel Beck Kimble, PharmD, Ambulatory Care Pharmacist
- Cheryl Browning, Quality Auditor
- Jeremy Peck, Computer Analyst

## Diabetes Intervention and Population Baseline

The target population is patients aged 18 years and older with a diagnosis of diabetes mellitus. All Clinic sites have access to an EMR allowing for immediate access to individual patient information by all providers, including patient labs tracking (LDL, etc) and alerts to notify the provider when it is time to schedule screenings and other interventions. In addition, quarterly reports are generated for each location, department, and individual physician.

## Improvement Interventions

Through an Automated Messaging System, patients receive appointment reminders and are prompted to schedule appointments when treatment is required based on chronic care

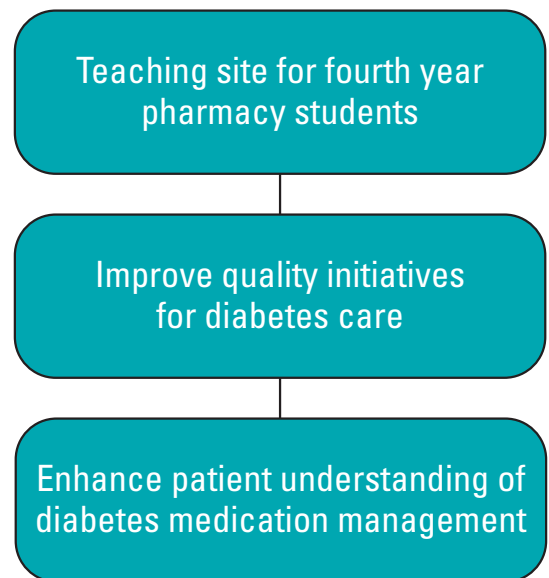
protocol. At Holzer Clinic, much attention is focused on maintaining physician motivation. Among the methods used to achieve this are

- Incorporation of clinical performance data in the peer-review process
- Sharing of individual physician data among the physicians, nursing staff, and administration
- Pay-for-performance
  - Participation in the CMS Physician Quality Reporting Initiative
  - Claims-based reporting mechanism for 4 diabetes measures

## Bringing Clinical Pharmacy to HC

Critical to the success of the program is the Affiliation Agreement established with the University of Charleston School of Pharmacy. A mutually beneficial arrangement, the agreement allows for fourth-year university students to gain clinical experience and for an ambulatory care pharmacist to work directly with clinic patients. Involvement of a pharmacist in an interdisciplinary diabetes management team has improved patient care.

## COLLABORATIVE GOALS



Patients are regularly scheduled to see the pharmacist, when possible, prior to their regular visits. The pharmacist provides education, information, and/or assistance with

- Disease state education
- Blood glucose meters
- Self-management of blood glucose
- Patient drug assistant programs
- Diabetes team
- Diet, exercise, and lifestyle recommendations

The pharmacist as an ambulatory care provider has the ability to help patients address 2 very important issues as they work to manage their disease: correcting mistaken perceptions and improving adherence.

### Mistaken Perceptions

Patients often feel they have done something wrong when additional therapy is added on. This is a key time to ensure that patients understand diabetes is a progressive disease and they should not feel more treatment is punishment for their own failure. This can be addressed by letting them know that this rise in glucose or A1C could have progressed even if they were 100% perfect with treatment and adherence by explaining the rate of beta-cell dysfunction. It is also important to point out the risks for long-term complications with uncontrolled glucose to help motivate patients to achieve the target glucose levels.

### Improving Adherence

The ambulatory care pharmacist can often address adherence issues by addressing patient information gaps and concerns.

*Disease State Education:* Helping patients better understand diabetes and its treatment options

*Reviewing Medications:* Discussing with patients the most common side effects of their meds and suggesting ways to minimize them

*Cost:* Cost can often be a major adherence factor. Patients may try to use less medication to cut costs. The pharmacist is able to evaluate whether there are less expensive alternatives with the same documented efficacy and make recommendations to the physicians.

## Measures

Holzer process and outcomes measures are aligned with the national recommendations from the ADA, CMS, and ICSI.

Measure	Goal
HgbA1C Measurement	Every 6 months
HgbA1C Control	<7%
LDL Measurement	Yearly
LDL Control	< 100 mg/dL
BP Measurement	Every Visit
Blood Pressure Control	< 130/80 mmHg
Retinal Exam	Yearly
Foot Exam	Yearly
Appropriate Adult Vaccination	As appropriate
PQRI Reporting	Report at least 3 measures on 80% or more of eligible encounters

## Challenges or Obstacles

Among the challenges addressed by the Holzer team have been

- Physician autonomy (lack of consensus in determining department practice standards)
- Lack of confidence in EMR-gathered information
- Variations in physician documentation
- Data inaccuracies (manual chart audits were introduced to address this issue)

## Outcomes and Successes

Over the 3 years since inception of the project, measurement of patient blood pressure, HgbA1C, and LDL was consistent, with BP reaching 100%. HgbA1C control saw initial increases from 2007 to 2008, but decreased again in 2009, while LDL control continued to increase into 2009. PQRI reporting, which began in 2008, increased significantly in the first year. In the area of appropriate adult vaccinations, Holzer saw modest adjustments in patient adherence.

## Future Steps

Moving forward, the Holzer Clinic Collaborative Effort intends to

- Utilize the intranet and Internet for access and feedback of provider-specific information (transparency)
- Expand diabetes education
- Broaden the population of focus to include prediabetes patients
- Adopt point-of-care A1C testing

