Pinnacle Health System (PHS) is a community-based, nonprofit, physician-led healthcare system serving the greater Harrisburg, Pennsylvania metropolitan area. It operates three hospitals as well as a network of family practices, imaging centers, and walk-in care centers. PHS has more than 6,000 employees, 1,250 physicians and allied health professionals, and more than 100 primary care providers. The organization is the fifth largest employer in Central Pennsylvania and one of the largest urban clinical institutions in the nation. In the ambulatory setting, PHS serves more than 200,000 patients across 19 sites and five counties. Its diabetes registry has more than 20,000 patients.

Challenge

PHS has had a well-established, successful inpatient diabetes control program since 2002. In 2010, PHS was the first health system in Pennsylvania to receive a certification and the status of “Center of Excellence” by The Joint Commission.

In 2014, 25% of PHS’ adult primary care population with diabetes had A1c levels greater than 9%. Data revealed these patients had increased inpatient readmission rates and a 30% increase in emergency department visits. Data suggested that diabetes care was fragmented—individuals with high A1c levels did not receive appropriate diabetes- or nutrition-related education.

In 2015, PHS established a goal of decreasing the adult primary care population with A1c levels greater than 9% from 25% to 20%. Additionally, the organization set out to increase diabetes education and nutrition counseling for patients with diabetes.

To achieve these objectives, PHS had to overcome several barriers, including:

- Physicians’ lack of time to manage diabetes patients with complicated cases and limited knowledge regarding newer diabetes medications
- Patients’ difficulty with self-managing their diabetes and limited access to diabetes educators and nutritionist counselors
Game Plan

PHS designed a multidisciplinary program to improve A1c levels among adult patients with diabetes in primary care offices. Through the endocrinologist-led program, PHS was able to:

- Provide diabetes and nutrition education support at primary care office sites
- Hire more diabetes educators and a diabetes-specific nurse practitioner to focus on complicated patient cases at the five most-populated sites
- Engage a nurse with experience in population health management to support patients
- Empower medical assistants to provide initial education and “download meters” in offices
- Develop a patient registry of individuals with A1c levels greater than 9% and secure monthly data reports for each practice for monthly distribution and discussion
- Encourage providers to discuss select cases with the endocrinologist via email and EHR and conduct quarterly endocrinologist-led case discussions at each site
- Offer providers additional training and educational programs on diabetes management
- Design a pocket booklet with guidelines from the American Diabetes Association for blood glucose control and distribute to all providers

Wins

Within 18 months of initiation, PHS’ adult primary care population with A1c levels greater than 9% decreased from 25% to 20.9%, with improvement at all sites. Despite the acquisition of many new practices over the course of the program, non-Medicaid patients with elevated A1c levels decreased from 25% to 12.5%.

Further, the program resulted in more than 100 additional diabetes education referrals in one year. Along with improvements in A1c control, patients experienced improvement in other diabetes measures (e.g., eye exams, microalbumin creatinine ratio).

Head Coach

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"We're all in this together!"

Playbook

The Together 2 Goal® Campaign Toolkit’s “Build an Accountable Diabetes Team” chapter may be a helpful additional resource.

Visit [http://www.together2goal.org/Improve/toolkit_improve.html](http://www.together2goal.org/Improve/toolkit_improve.html) for more information.