AMGA

Advancing High Performance Health

Together 2 Goal®

AMGA Foundation

Together 2 Goal® Innovator Track Cardiovascular Disease Cohort

Case Study

PriMED Physicians/MediSync

Organizational Profile

PriMED Physicians (PriMED) is a physician owned and governed medical group serving the greater Dayton, Ohio, area. Its 55 physicians—mostly primary care, including hospitalists and outpatient care—serve more than 66,000 patients across 14 sites. The group uses the Allscripts TouchWorks® electronic health record (EHR) platform.

Executive Summary

PriMED has been working to improve chronic outcomes since 2003. In its original analysis of why chronic disease outcomes were so often sub-optimal, PriMED discovered that, in addition to the challenge of patient non-compliance with therapy, there was a significant challenge in having physicians remember and correctly apply evidence-based standards when selecting medications and recommending therapies.

Based upon that finding, PriMED has worked since 2003 to create tools that help physicians and other licensed practitioners correctly determine the precise medications for each patient with major chronic diseases, including blood pressure (BP), lipids, and diabetes.

PriMED began with paper-based tools for medication selection and achieved 91% BP control by 2005. However, as the group added diabetes, asthma, and other diseases—and as the evidence-based standards become more detailed—paper and pencil tools became ineffective and cumbersome.

Around 2016, PriMED began to transition to electronic tools to support physician medication accuracy. To date, the group has deployed artificial intelligence (AI) decision support technology integrated with the EHR that addresses BP. PriMED just finished transitioning heart failure, which is in the testing phase. Lipid management is in production with an anticipated release date in late 2019, and blood glucose management will be coming in early 2020. The lipid program will cover all patients, not just patients with diabetes. The group experienced a set-back when a new lipid standard was published by the American College of Cardiology (ACC) and American Heart Association (AHA) in November 2018. The new standard is much more detailed and complex than the 2013 standard it replaced, which reinforced PriMED's decision to integrate AI tools with the EHR.

Given the number of AI transitions that relate to the management of diabetes and cardiovascular disease (CVD) risk, PriMED joined the Together 2 Goal® (T2G) Cardiovascular Disease Cohort (CVD Cohort) as a means of continuing to work on improvements in this area.

Program Goals and Measures of Success

In 2003, PriMED set a goal that every major evidence-based standard should be met by all eligible patients at a rate of 90% (e.g., 90% of patients achieve BP control, 90% achieve A1c control). Typically, there are driver measures of success that vary by disease, but the end goal is to help patients achieve the highest possible rate of control for each individual disease they may have.

Existing Diabetes Population and Care Structure

From the start, PriMED has always aimed to correctly diagnose every patient with whatever chronic disease might be present and to apply the evidence-based standard for each patient during every office visit.

In recognition that the evidence-based standard often includes various classifications (i.e., the levels of cardiovascular therapy change by the degree of CVD risk), the effort encompasses the work of defining the correct level of risk and then achieving the correct level of control.

Interventions

PriMED developed the expectation that all major chronic diseases are controlled by primary care physicians because of the well-documented fact that specialty care is often more expensive and, generally, not more successful. There are instances when patient complications or morbidities may require that another physician manages a specific patient's chronic diseases (e.g., an oncologist during chemotherapy, an obstetrician/gynecologist during pregnancy).

Provider and staff education

In general, PriMED's goal is to turn all complex work into process work. Therefore, PriMED has the duty and obligation to explain the process to all staff members, whether they are physicians, supporting physicians in the office, or working the telephones. To do this, PriMED documents its processes and trains and retrains staff members as required. In some instances, this has to do with the collection of data and information, and in other instances, it has to do with the patient's check-in and diagnostic testing. As an example, for a patient with hypertension, the standard process is to measure at least two BP readings five minutes apart followed by a pre-ordered impedance cardiography (ICG) test.

Patient education

PriMED tries in every instance to have a way to explain to patients the nature of their health issue and the importance of participating in therapy. Patients who do not participate in their therapy have little opportunity to achieve evidenced-based standards. Each of PriMED's educational approaches is disease-specific in order to help the patient learn both about the problem and the level of their success in managing the problem from one visit to the next.

Information technology

PriMED has always put a great emphasis on having accurate diagnoses on the problem list. With an accurate diagnosis, it is not difficult to determine the level of patient success in achieving evidence-based goals by looking at the EHR. The work processes for both physicians and non-physicians stipulate exactly what data pieces need to be entered into the record. The absence of a data piece is regarded as a failure for that patient's achievement of the goal being measured.

The group regularly reviews the EHR to find evidence of chronic diseases that are not on the problem list (i.e., A1c or glucose readings that suggest diabetes, BP readings that suggest hypertension, etc.). The goal is to get all chronic diseases identified.

New technology

Available EHR technologies currently do not allow the high-level processing necessary to handle the variables and calculations that need to be included when making drug therapy recommendations. Therefore, PriMED created a separate application that exists in the cloud which can successfully compute the best-recommended medicines for each patient. In order to facilitate physician use and reduce time, the data is pushed from the EHR into the cloud. The answers are spun and reinserted inside a window within the EHR context. This is by far the most difficult of the challenges that PriMED faced.

Clinical support

PriMED uses existing evidence-based guidelines and clinical pathways as a starting point. The group has always referred to its work as "process work," meaning that PriMED takes what is often very broad or general recommendations (e.g., recommendations from the AHA, ACC, American Diabetes Association (ADA)) and defines a more specific and precise way to interpret the status of each patient, the treatment goal or objective for each patient, and the optimal therapy to achieve that goal. In some evidence-based standards, the recommendations are fairly precise and specific, but others are broad. PriMED uses PharmDs, primary care doctors, and specialists to research the literature in order to make the process more specific when the evidence standards are broader.

Most patients return for therapy. Occasionally, patients discontinue or do not follow up on their own care. PriMED tracks such patients and calls them to invite them to reengage in the therapeutic process. This outreach program is one of the ways in which the group's focus has shifted from patient to population oriented.

Compensation

For many years, PriMED's physician compensation has been linked to participation in the care processes that are developed and deployed. The group has found it to be more equitable to recognize the degree to which physicians and other providers follow processes than to judge them solely on their outcomes.

This philosophy is grounded in the reality that—even when processes are followed closely—outcomes at sites where many of the patients are socioeconomically disadvantaged and/or on Medicaid may be different than outcomes at sites serving more affluent populations. PriMED has an urban site

that proudly serves an ethnically diverse patient population of socioeconomically disadvantaged patients with a high percentage of Medicare and Medicaid insurance, and—despite the challenges it faces—that location has achieved 90% to 91% BP control.

Outcomes and Results

During the CVD Cohort, PriMED continued to track measures associated with the T2G Core Track, including A1c control, BP control, and medical attention for nephropathy (see Appendix). The group also tracked new CVD-related measures, including non-tobacco status and lipid management for secondary prevention (see Appendix). With the exception of the BP control numbers, the results largely reflect PriMED's "paper and pencil" interventions.

As the numbers illustrate, PriMED has maintained or improved in all tracked measures from baseline.

Lessons Learned and Ongoing Activities

As described above, this project is not yet completed. PriMED plans to complete and deploy the project around March 2020. It is expected that outcomes will increase significantly at that time.

Results for A1c Control and the Diabetes Care Bundle

Phase	HbA1C Control	Diabetes Care Bundle
Baseline	74%	47%
T2G Year 1	78%	56%
	77%	56%
	77%	56%
	78%	56%
T2G Year 2	76%	55%
	78%	56%
	77%	55%
	75%	55%
T2G Year 3	74%	56%
	75%	58%
	77%	59%

Results for BP Control and Medical Attention for Nephropathy

Phase	BP Control	Medical Attention for Nephropathy
Baseline	92%	93%
T2G Year 1	90%	92%
	91%	92%
	89%	92%
	91%	91%
T2G Year 2	91%	91%
	90%	91%
	92%	90%
	93%	91%
T2G Year 3	93%	92%
	92%	92%
	93%	93%

Appendix

Results for Lipid Management (CVD Cohort Measures)

Phase	Portion of Secondary Prevention Patients with Any Statin (Rx or Active Med List)	Portion of Secondary Prevention Patients with High Intensity Statin (Rx or Active Med List)	Portion of Secondary Prevention Patients with Most Recent LDL<70
Baseline	91.7%	58.1%	49.9%
CVD Year 1	91.8%	58.0%	52.6%
	91.6%	58.2%	51.8%
	91.0%	57.5%	53.0%
	91.7%	58.6%	51.5%

Results for Smoking Status (CVD Cohort Measures)

Measurement Period			Measure 1: Tobacco-Free		
			Denominator	Numereator/Measure	
Phase	Ending Quarter	Reporting Period	T2G Cohort (Denominator, Column D)	T2G Cohort Patients w/ Most Recent Recorded Smoking Status = "Tobacco-Free"	Proportion of T2G Cohort "Tobacco-Free"
Baseline	2018 Q1	04/01/2017 - 03/31/2018	3,364	3,025	89.9%
CVD Year 1	2018 Q2	07/01/2017 - 06/30/2018	3,418	3,071	89.8%
	2018 Q3	10/01/2017 - 09/30/2018	3,379	3,033	89.8%
	2018 Q4	01/01/2018 - 12/31/2018	3,318	2,982	89.9%
	2019 Q1	04/01/2018 - 03/31/2019	3,180	2,873	90.3%

Project Team

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