

Maximize the value of your diabetes population management program with advanced analytics

PLAYBOOK



## STEP ONE:

# Analyze your patient population



### **Bend the cost curve: Learning more about your patients can lead to higher quality care**

As providers increasingly assume more risk, population health management (PHM) is being looked to as a way to improve the quality and delivery of health care and control costs. As part of this strategy, providers are expanding their chronic disease management programs into their communities and proactively monitoring and interacting with the populations they serve.

Underlying the success of these programs is the effective use of advanced analytics. With the help of sophisticated tools that scrutinize longitudinal claims and clinical data, for instance, providers are getting a more robust view of their diabetic population. They are identifying patients who haven't been seen regularly, or whose health metrics are outside acceptable limits, and finding ways to more intensely manage them.



### **Foster change leadership and a culture of data before launching initiatives**

Population health management starts with building a coalition of leaders to lead PHM initiatives. Such leaders may include a steering committee and the engagement of a range of disciplines spanning areas that are critical to success.

For example, before tackling chronic disease management, Cornerstone Health Care — a multi-specialty clinic in the Piedmont Triad region of North Carolina — convened workgroups to design processes and define measures. They focused on an automated system for outreach and patient engagement. The physician-led group began by educating and aligning its entire staff on the same clinical pathway.

For population health management to succeed, organizations need to do more than lead from the top down. They also need to cultivate a bottom-up cultural change by encouraging trust in their data. The Mayo Clinic Health System, for instance, has engendered trust among physicians by offering training for those who use data to improve decision making. The integrated system has also established governance mechanisms to ensure that priorities are aligned with capabilities and that data are used properly.



### Leveraging advanced analytics



### **With the help of sophisticated tools that scrutinize longitudinal claims and clinical data, providers are:**

- Getting a more robust view of their diabetic population
- Identifying patients who haven't been seen regularly
- Identifying patients whose health metrics are outside acceptable limits
- Finding ways to more intensely manage these metrics

## STEP TWO:

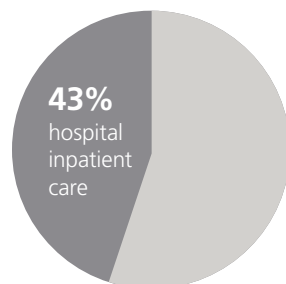
# Predict risk. Are your patients at risk of being hospitalized?

Proper management of patients with diabetes requires a complete picture of their health — including predicting their risk for future complications and more accurately targeting interventions.

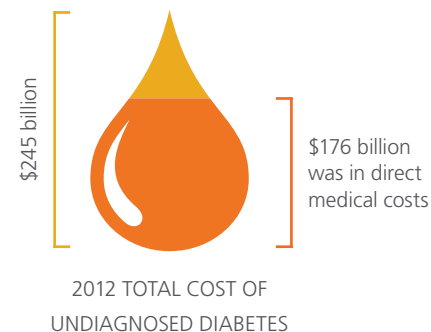
Research shows that the total cost of undiagnosed diabetes in 2012 was \$245 billion, of which \$176 billion was in direct medical costs. The bulk of that expenditure — 43 percent — stemmed from hospital inpatient care.<sup>1</sup> But much of the cost and harm to quality of life caused by this chronic condition can be prevented. Organizations can preempt these costs, and prevent complications, by applying data to gain a deeper understanding of a diabetic population and implementing a plan for concerted intervention.

Advanced analytics enable organizations to sort patients with diabetes by risk of future hospitalization. Applying advanced analytics to a broad database of longitudinal data, for instance, can reveal a diabetic patient's likelihood of an initial admission, a readmission and an emergency department visit within six months. Such information, in turn, can guide care coordination efforts.

TOTAL COST OF UNDIAGNOSED DIABETES



In addition to identifying and acting on gaps in care, organizations can use longitudinal data to track clinical, operational and financial performance. Dashboard reports, for instance, can provide valuable insight into clinical performance, laying the groundwork for initiatives designed to promote evidence-based medicine. Blood sugar control, lipid management, foot and eye exams, diligent monitoring for kidney disease — all are components of diabetes care that advanced analytics can report on in detail. Gaining access to comprehensive longitudinal data can also help providers benchmark their practices against other practices across the country.



Organizations can use longitudinal data to:



IDENTIFY AND ACT ON GAPS IN CARE



TRACK CLINICAL, OPERATIONAL AND FINANCIAL PERFORMANCE



BENCHMARK THEIR PRACTICES AGAINST OTHER PRACTICES ACROSS THE COUNTRY

## STEP THREE:

# Stratify patients by risk for targeted intervention

Segmenting a patient population lays the groundwork for devising effective care management and patient engagement programs. For many organizations, this has included retooling their approach from a reactive model to one that is driven by predictive, proactive intervention and care.

Perhaps more so than any other disease, diabetes care can be improved on a number of levels through advanced analytics. By taking a closer look at lab criteria such as HgA1c or LDL cholesterol levels, for instance, providers can identify patients whose disease is being poorly managed.

Mid Hudson Medical Group in New York, for example, has used a clinical intelligence platform to identify its high-risk diabetic patients and focus its care coordination efforts to improve the management of chronic conditions.

After analyzing its data, Mid Hudson was able to identify which of its diabetic patients met criteria for proactive outreach. The group was able to single out patients whose HgA1c was greater than 7 percent at their last visit, or who had not been seen by a provider within the last 12 months. As a result, about a third of those patients were seen one or more times within the first eight months of the program. In this group of diabetics, one-third achieved an HgA1c of less than 8 percent, and 60 percent of those with HgA1c higher than 9 percent became more

intensively managed through more frequent visits with their primary care physician.

San Francisco Bay Area-group Brown & Toland Physicians — whose initial population health improvement focus was on diabetes, hypertension and preventive care — has used its data to create a working registry that in-house care coordinators use to target outreach to high-risk patients.

Thirty to 40 percent of each day's schedule is held for same-day or next-day appointments so that patients identified as having gaps in care can be seen quickly. Patients with uncomplicated problems can be seen in 10-minute "quick sick" appointments. As a result, wait times for patients has dramatically improved.

Providers who use PHM principles to manage their diabetic population will be ahead of the curve as the industry continues its march toward value-based reimbursement. Leveraging advanced analytics to create more comprehensive risk profiles for patients will better position providers to make the transition from providing care to managing health.

### MID HUDSON MEDICAL GROUP

A 125-physician medical group, Mid Hudson has 16 locations throughout the Hudson River Valley in New York with a patient-centered medical home (PCMH) initiative. In September 2011, it started using Optum health care analytics to support population health management and continuous quality and cost improvement for all patients.

### BROWN & TOLAND HEALTH SERVICES

Known for excellent clinical care and innovation in the San Francisco Bay Area, Brown & Toland was one of the first medical groups in the nation to deploy integrated electronic health records (EHR) in a private practice setting. It was selected as a Pioneer Accountable Care Organization (ACO) in 2011 and is now leading transformation through its patient-centered medical home, My Health Medical Group (MHMG), which uses Optum health care analytics.

## SOURCES

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<sup>1</sup> American Diabetes Association. The Cost of Diabetes, 2013. <http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html>, (accessed Jan. 27, 2014.)

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