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Together 2 Goal®
AMGA Foundation

Together 2 Goal® Innovator Track Cardiovascular Disease Cohort

Case Study

Sharp Rees-Stealy Medical Group

Organizational Profile

Sharp Rees-Stealy Medical Group (SRS, sharp.com/rees-stealy) was established in 1923 to serve the people of San Diego. Today, SRS is part of Sharp Healthcare, an integrated system which has a full continuum of healthcare services serving a total of 3.2 million people in San Diego, California.

SRS offers a wide range of services, including a health plan, two affiliated medical groups (of which SRS is one), 22 outpatient clinics, seven acute and specialty hospitals, five urgent care centers, and numerous outpatient and specialty services.

Powered by 2,800 employees—including 557 physicians and 95 advanced practice providers—SRS serves 305,000 patients who log 1.4 million visits per year.

Executive Summary

According to the *2017 National Diabetes Statistics Report* from the Centers for Disease Control and Prevention (CDC), an estimated 30.3 million Americans have diabetes. Approximately 5% have type 1 diabetes and the remaining 95% have Type 2 diabetes (diabetes). Over the last 20 years, the number of adults with diabetes has more than tripled, and the total direct and indirect estimated cost of diagnosed diabetes in the United States in 2012 was $245 billion.[1]

Due to factors such as high blood sugar, high blood pressure (BP), and obesity, cardiovascular disease (CVD) is the leading cause of death for people with diabetes. The American Heart Association (AHA) considers diabetes to be one of the seven major controllable risk factors for CVD. However, statistics indicate that people with diabetes are two to four times more likely to die from heart disease than people without diabetes. At least 68% of people age 65 or older with diabetes die from some form of heart disease; and 16% die of stroke.[2]

SRS participated in the Together 2 Goal® (T2G) Innovator Track Cardiovascular Disease Cohort (CVD Cohort) from May 2018 to May 2019 as part of a larger effort to implement a successful, sustainable CVD Risk program the organization named Healthy Hearts.

SRS identified around 2,000 patients who were eligible for the CVD Cohort. During the 12-month program, SRS improved in all six Cohort measures and also achieved BP control in 88% of patients.

During the CVD Cohort, SRS learned a variety of lessons, including that change takes time; that messaging should be consistent and frequent; that processes must be simple and easy to perform; the importance of educating all patient care employees about the work and goals; and that regular review of metrics (e.g., weekly, monthly) allows for brainstorming, problem-solving, and timely follow-up.

Program Goals and Measures of Success

The primary goal of the CVD Cohort was to improve cardiovascular management in patients with Type 2 diabetes. Measures of success (see Appendix) were set forth by the AMGA Foundation based on industry-standard measures including: NCQA-HEDIS; United States Preventive Services Task Force; 2013 American College of Cardiology/American Heart Association (ACC/AHA) Prevention Guidelines; and 2018 American Diabetes Association (ADA) Standards of Care.

For patients included in the CVD Cohort, SRS aimed to develop and implement a sustainable CVD Risk Reduction program. Another goal was to promote the use of the CVD risk calculator and implement it into the electronic health record (EHR).

When it comes to organizational goals, SRS aimed to increase BP control to 85%, increase statin adherence to 80%, and improve the prescribing of the medication bundle by 20% for patients in the CVD Cohort. SRS also hoped to achieve BP control for 84% of all patients with a hypertension (HTN) diagnosis as well as fewer new diagnoses of acute myocardial infarction (MI) and/or stroke in patients per 1,000.

Existing Diabetes Population and Care Structure

At SRS, there are more than 550 physicians who care for more than 24,000 patients living with diabetes (see Appendix for how SRS identifies its diabetes population). All patients are seen at one of 22 multispecialty sites throughout San Diego.

Of all SRS patients with diabetes, 9,535 were included in the CVD Cohort, and 1,944 of them had evidence of CVD.

SRS has a diabetes and HTN data mart in the data warehouse system pulling data (age, race, diagnosis codes, lab values) from the clinical, billing, and patient registration systems. The CVD risk score is calculated within the data mart and provided to the physicians.

Although primary care providers (PCPs) are primarily responsible for caring for patients living with diabetes and CVD, SRS employs five endocrinologists and nine cardiologists to consult with and care for those with specialty needs.

SRS offers patients a diabetes prevention program recognized by the CDC and comprehensive diabetes programs and services recognized by the ADA. All provider, staff, and patient educational materials are evidence based and provided by the ADA, ACC, and MCG Health. SRS uses a team approach that leverages Certified Diabetes Educators (CDEs), Registered Nurse (RN) case managers, and dieticians who are embedded at clinic sites. The goal of the care teams is to improve clinical outcomes, health status, and quality of life using patient-centered care that enables the patient to attain the knowledge, skill, and ability for self-care. Operating with the belief that patients primarily produce their own outcomes, SRS supports informed decision making, self-care behaviors, problem solving, and active collaboration with the care team.

SRS uses Allscripts Touchworks® as its EHR. The atherosclerotic CVD (ASCVD) risk calculator is not currently embedded in the EHR, but progress is being made towards that goal.

Interventions

The first step SRS took during the CVD Cohort was to form a steering committee with multidisciplinary representation from physicians, pharmacists, clinic site staff, population health care management staff, data management and senior leadership. The steering committee used the monthly committee meetings to develop comprehensive identifying data lists along with metrics for weekly to monthly in-process and quarterly outcome reporting.

SRS then used evidence-based clinical guidelines to develop an educational strategy and disseminate it to physicians, clinic site staff, and supportive clinical departments. Algorithms included the use of a CVD risk calculator and a peer-reviewed medication bundle for treatment of HTN.

SRS also developed a pharmacy protocol—approved by the Physician Advisory Committee—that enabled pharmacists to support the medical group by working to the top of their licenses as they order labs, perform medication reconciliation, manage medication orders to achieve the medication bundle goal, and conduct health coaching during patient outreach.

During the CVD Cohort, SRS defined, established, and implemented the Healthy Hearts population health program. As part of this program, SRS identified a dedicated RN certified case manager and health coach to focus on CVD risk-reduction outreach case management, ongoing health coaching, and referrals to pharmacy for medication therapy management (MTM). Because of this program, CVD risk reduction became a priority item during several meetings—including the diabetes steering committee, HTN steering committee, and other high-level physician and quality strategy meetings—and the use of remote BP cuffs doubled.

The population health team receives many lists on a monthly basis for high-risk outreach for case management, health-coaching, coordination of care, and closure of care gaps. Each month, SRS generates a new list of patients diagnosed with diabetes who have CVD risk and identifies these patients as candidates for Healthy Hearts outreach. In addition, the pharmacy team receives a list of patients who meet the criteria for MTM using the established HTN protocol and clinic sites receive a list of patients with an HTN and a last documented BP of 140/90 mg/DL so that they can be contacted and brought in during a nurse visit to recheck the BP. Referrals to the PCP are made as appropriate.

SRS works to provide consistent processes across the healthcare delivery system, so an organizational policy was implemented to ensure that patients with an elevated BP at an office or urgent care visit get checked again and that the information is properly documented. This policy established a successful, consistent process for treating CVD risk within SRS, resulting in over 2,500 more patients with a controlled BP.

Since there are 24,000 patients with a diagnosis of diabetes in the SRS population, one dedicated Healthy Hearts nurse and one dedicated health coach is not sufficient to address all patients. As a result, SRS provided training on the processes and interventions established for the Healthy Hearts program to the entire clinical staff in the Population Health department as well as to the clinical staff at all 22 sites. SRS expects that all clinical staff interacting with patients who are at risk for CVD act as a health coach and make appropriate referrals within the care teams.

Clinic sites also completed a Lean Practice Transformation in which processes have been implemented for pre-visit screening and patient outreach in order to ensure that office visits are efficient by closing care gaps and prescribing appropriate labs and testing. The CVD processes and recommendations are part of SRS standard work. Referrals for case management, health coaching, and pharmacy are included in this flow.

SRS developed a participating provider dashboard for physicians and clinic sites to see their progress towards goals and care gaps on a daily, weekly, or monthly basis.

SRS has embedded clinical guidelines for diabetes and HTN care in the EHR. Both sets of guidelines were updated in 2019 and will continue to be evaluated on a yearly basis. The organization also utilizes MCG Health's evidence-based chronic care guidelines, which outline clinical care for all disciplines and include education pieces for patients and benchmarking for the organization.

Outcomes and Results

SRS reported performance data on a quarterly basis during the 12-month CVD Cohort and experienced improvement in all six measures (see Appendix).

SRS observed a 4.8% improvement in patients who reported a tobacco-free status, reaching an overall total of 91.3%. To achieve this, SRS offered free smoking cessation texting programs and on-site classes to patients and also sent letters during the Great American Smokeout in November 2018, reminding patients about SRS's smoking cessation programs.

SRS observed a 14% increase in the use of aspirin for primary prevention and a 4.4% increase in the use of aspirin for secondary prevention. Much of the increase was due to the documentation of aspirin use within the EHR. Patients were screened through phone outreach and texting programs. In November 2018, SRS physicians pushed back on prescribing aspirin mainly due to the ASCEND study.[3]

SRS observed a 29.7% increase in statin prescriptions to reach an overall total of 91.3%; however, part of the increase was due to the data capture of several statins that had not been captured initially. SRS had the same issue with high-intensity statins, as the organization observed a 66% increase in the use of high-intensity statins, reaching an overall total of 56.6%. The actual increase in statin use was realized primarily through the work of the pharmacists using the pharmacy protocol. The pharmacists found that, once on a statin, patients were especially agreeable switching to a high-intensity statin. This was a meaningful result for SRS, as ongoing education on the use of statins had been provided for several years. SRS believes that the use of the CVD risk calculator was core to meeting the statin goal, as the organization observed the powerful result when physicians and patients calculate the CVD risk score together.

SRS observed a 10.1% increase in measured LDL cholesterol less than 70mg/dl, which the organization felt was a direct result of more patients taking statins.

There were several other internal measures tracked, such as percentage of the HTN patients with a CVD risk score of over 7.5% who were on the medication bundle per protocol (i.e., on daily aspirin, an angiotensin converting enzyme (ACE) inhibitor or angiotensin-receptor blocker (ARB), a statin, and a thiazide diuretic). During the CVD Cohort, the entire SRS population remained at 2% for the complete bundle, with 16% on three medications. As of May 2019, however, 3% of the CVD Cohort population was on the medication bundle, which was 41.1% higher than the overall population. Looking further, 27% of the CVD Cohort population was on three medications, which represented a 58.8% increase over the total population. SRS is revisiting the medication bundle this year, as the organization has determined that aspirin for primary prevention should not be included. Physicians will be having individual discussions with their patients weighing risk and benefit.

On a monthly basis, SRS tracks the number of patients that have a controlled BP. In 2019, the SRS goal for the overall population was 84%. By the end of the CVD Cohort, the total

number of patients with a controlled BP was 83% in the overall population. Within the CVD Cohort population, 88% of SRS patients had a controlled BP. In addition, SRS tracks a monthly measure for BP rechecks completed by clinic sites as well as utilization of related nurse visits. Once this process was implemented, SRS saw an increase of 500 nurse visits per month over all 22 sites.

Another monthly metric SRS tracks is Diabetes Advanced Perfect Care, which shows the percentage of patients that have a HgA1C below 8, an LDL below 100 mg/dL, an active statin order, completed nephropathy screening, and a pneumonia vaccine. SRS's entity goal for 2019 was set for 40%; it is currently at 49%.

Lessons Learned and Ongoing Activities

During the CVD Cohort, SRS learned a variety of lessons, including that change takes time; that messaging should be consistent and frequent; that processes must be simple and easy to perform; the importance of educating all patient care employees about the work and goals; and that regular review of metrics (e.g., weekly, monthly) allows for brainstorming, problem-solving, and timely follow-up.

SRS feels its most successful intervention was using pharmacists and RN case managers for patient outreach. During these interactions with patients, pharmacists and RN case managers assessed patient understanding of CVD risk, coached patients on CVD risk, and performed MTM based on the developed protocol. Referrals were made by the nurse and health coaching staff to the pharmacist, who was able to make meaningful changes to the medication list, assisting the PCPs with the plan of care.

SRS physicians are not currently putting patients with CVD risk on the proposed bundle on a proactive basis. The protocol is being updated to eliminate aspirin from the bundle as a result of the ASCEND study and other publications. Physicians will be evaluating individual patients and discussing the benefit and risks of aspirin on a case-by-case basis.

SRS feels that increasing visibility of the project from the start might have helped draw more attention to the work the team was doing.

SRS feels that it is challenging to keep consistent messaging and to keep the work being done in the forefront. Clinic sites are busy and have competing priorities. As a result, it is essential to keep communication open and to continue working collaboratively with clinic site staff. Staffing resources are a challenge with the large number of patients diagnosed with Type 2 diabetes and CVD.

Halfway through the CVD Cohort, SRS added a pre-visit workflow at the sites to close diabetes and CVD care gaps. The day before the patient arrives, the physician and medical assistant do the work necessary to prepare for an efficient office visit. The sites also completed Practice Transformation and the standardized approach that was created positively impacts quality of care, fitting nicely with this initiative.

SRS has a sustainable program. The organization plans to continue with the diabetes and HTN steering committees, update protocol and guidelines as needed, and provide monthly outcome reporting. Daily and weekly metrics are currently available on a dashboard for physicians and clinic sites. Those metrics will be evaluated by the steering committees to ensure they are the correct measures to monitor going forward. As SRS makes improvements, the metrics will most likely need to be enhanced or changed.

References

1. Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf. Accessed October 10, 2019.

2. Cardiovascular Disease and Diabetes. American Heart Association website. heart.org/en/health-topics/diabetes/why-diabetes-matters/cardiovascular-disease--diabetes. Updated August 30, 2015. Accessed October 10, 2019.

3. The ASCEND Study Collaborative Group. 2018. Effects of Aspirin for Primary Prevention in Persons with Diabetes Mellitus. New England Journal of Medicine, 379: 1529-39.

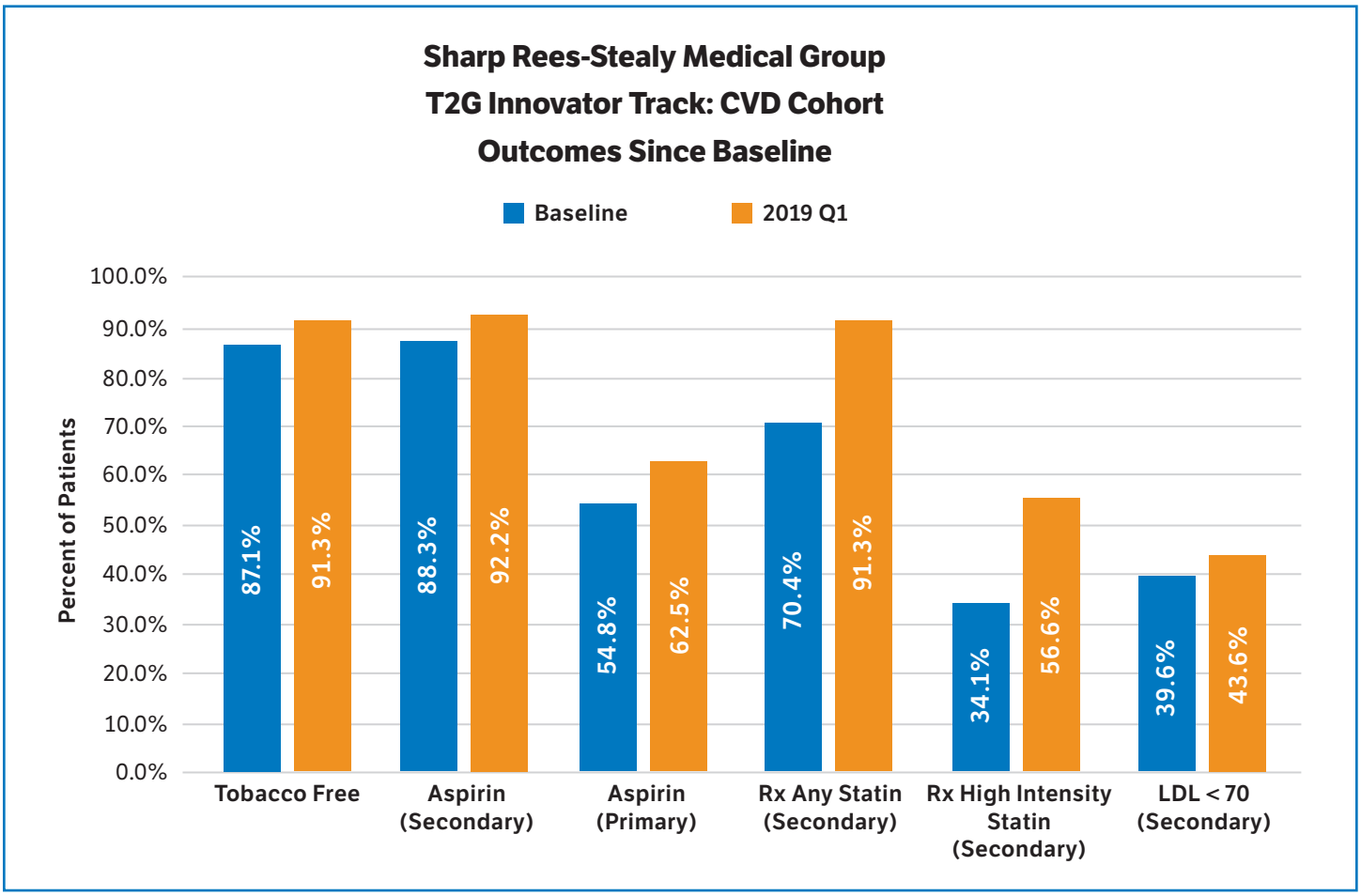
Measures of Success for Cohort

	Measure	Measure Description
1	Non-tobacco user	Proportion of T2G patients whose most recent tobacco status is determined to be “tobacco-free”.
2a	Daily aspirin or antiplatelet in patients age ≥ 50, secondary prevention	Proportion of T2G patients eligible for secondary prevention with documentation of daily aspirin or another antiplatelet, or documented exception or contraindication during the measurement period.
2b	Daily aspirin or antiplatelet in patients age ≥ 50, primary prevention	Proportion of T2G patients eligible for primary prevention with documentation of daily aspirin or another antiplatelet, or documented exception or contraindication during the measurement period.
3a	Any statin, secondary prevention	Proportion of T2G patients eligible for secondary prevention on a statin during the measurement period.
3b	High-intensity statin, secondary prevention	Proportion of T2G patients eligible for secondary prevention on a high-intensity statin during the measurement period.
3c	LDL cholesterol < 70 mg/dL, secondary prevention	Proportion of T2G patients eligible for secondary prevention with a measured LDL < 70mg/dL.

Population Identification Criteria

SRS identifies the diabetes population based on patients who have ***any*** of the following criteria:

- Two or more outpatient visits on different dates of service with a qualifying diabetes diagnosis code in the last 24 months; or
- One inpatient visit with any one of the qualifying diabetes CPT and diagnosis codes in the last 24 months in diagnosis sequence position 1-3; or
- Two or more lab values for HgbA1c of > 6.5 in the last 24 months on different dates of service; or
- Dispensed a diabetic medication (other than Metformin) in the last 24 months except where there is a diagnosis of Gestational Diabetes; or
- One or more qualifying diabetes diagnoses active on the EHR Touchworks problem list



Project Team

Karen Alanis

Kim Allen, R.Ph.

Janet Appel, M.S.N., RN, CCM

Gary Barrow-West, B.H.A., RN

Paula Burich, B.S.N., RN

Renee Cobb, NBC-HWC, CPT, WLS, S+EI Coach

Odette Crandall, B.S.N., RN

Trung (Andy) Dang, M.D.

Scott Heimer

Fon Hokanson, Pharm.D.

Anne Hopkins, M.S.

Kandice Krawcion, B.S.N., RN

James Lin, M.D.

Bianca Morales-Gamino, RN, M.S.N.

Sara Pouliot, M.P.H.

Silvia Rivas-Coleman, Pharm.D.

Andrea Snyder, B.S.N., M.B.A., RN

Christine Tedeschi, M.S., RN, CCM, CDE

Mary Jo Webb, RN

Kelly Young, RDN, CDE

AMGA

Advancing High Performance Health

AMGA Foundation

One Prince Street
Alexandria, VA 22314-3318

amga.org/foundation

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