



It Takes a Village

Address social determinants of health to bridge care gaps; address costs, outcomes

By Michael Miller and Sanjay Seth, M.D.

Improving social determinants of health (SDoH) is gaining focus within value-based care models, according to Karen DeSalvo, M.D., former national coordinator for health information technology, and Jeffrey Levi, Ph.D., professor of health management & policy at the Milken Institute School of Public Health at The George Washington University.

Writing in *Health Affairs Blog*,¹ Drs. DeSalvo and Levi state, “For the first time in generations, life expectancy has plateaued and is declining. Much of this rising mortality is attributable increasingly to determinants of health not readily addressed by

the healthcare system. There is now a bipartisan consensus that SDoHs are a critical pathway to addressing cost and outcomes.”

Social determinants of health are conditions in the patient’s environment that impact their risk profile, including general health, functioning, quality-of-life, and outcomes. Conditions (e.g., social, economic, and physical) in varied environments and settings (e.g., school,

church, workplace, and neighborhood) influence patterns of social engagement, sense of security, and well-being.

Physicians agree that holistic care improves patient compliance and outcomes, but they lack the infrastructure and resources to assess and manage SDoH; nor is the physician necessarily the right professional to focus on SDoH. The optimal solution distributes SDoH information gathering and care tasks across an interdisciplinary team and preserves a physician’s precious time for medical evaluation, treatment, and direct-

ing the plan to resolve SDoH issues.

This article describes a successful clinically integrated network’s (CIN’s) strategy in using a broad team approach to deliver holistic care.

SDoH Support Rationale

Following the direction of the Centers for Medicare & Medicaid Services (CMS) to enroll 70% of Medicare beneficiaries in a value-based program, commercial and other government payers are working with providers to identify and enroll patient populations in these payment models. This shift from volume to value calls for proactive management of health and high-quality care at reduced cost and rewards or penalizes organizations based on the ability to do so.

Organizations therefore must create the infrastructure to deliver holistic care, including managing SDoH issues. Physicians must have the resources they need to be effective and avoid cluttering their day with resolving social, psychosocial, and other environmental issues. For example, it’s simply not feasible for a physician to spend an hour educating a noncompliant diabetic patient on ways to manage nutrition issues. Further, asking physicians to take on additional work leads to burnout, professional dissatisfaction, and, ultimately, turnover, early retirement, and less than full-time work.²

Leaders also recognize the valuable role of primary care physicians (PCPs) in sustaining a value-based care program. Research shows that primary care helps prevent illness and death and is associated with equitable distribution of health in populations.³ PCPs are the catalyst for downstream patient care activity, and it is important to optimize this asset amid the expanded responsibilities inherent in value-based care.

A strong, comprehensive primary care program is the glue that binds organizations and care team members in delivering holistic medicine, including identification and management of SDoH issues.

Investing in nonbillable, socially conscious, person-oriented services to manage SDoH produces positive outcomes that drive high incentives, which offset the investment in resources to support the program. Such is the case with Shore Quality Partners.

The Launch

With the downturn of the gaming industry in Atlantic City, the Shore Quality Partners community lost more than 15,000 jobs, and its citizens experienced a painful economic impact. Many patients had not seen their primary care doctor in years and routinely sought care at hospital emergency departments (EDs) for nonemergency illnesses.

Against this backdrop and aware of mounting evidence suggesting a patient’s socioeconomic factors influence health outcomes, Shore Quality Partners initiated practice transformations attentive to social determinants that shaped its disadvantaged 40,000-member population.

In 2014, network administrators teamed with 240 independent, employed, and contracted PCPs and specialists to launch a population health management program to transition from

SDoH at Work

A Shore endocrinologist referred a 67-year-old male patient to the program for diabetes and nutrition education related to worsening blood sugar.

The patient had an eight-year history of Type 2 diabetes, hypertension, and hyperlipidemia. He admitted to being noncompliant, in denial, and a self-described “picky eater.” He was strongly resistant to change; however, his supportive wife was committed to helping him make lifestyle changes. He reported a lack of exposure to diabetes education, which Shore’s diabetes educator promptly rectified.

Shortly following the instruction, the patient started checking his blood sugar twice daily, maintaining consistent meals and snacks, and keeping a food diary logging carbohydrate intake. Over the course of four months and two follow-up appointments, the patient changed his diet and activity levels.

The outcome: His HbA1C decreased from 10% to 6.7%, and his triglycerides fell from 443 to 125. Inspired by his success, the patient continues to set new health goals with the help of his wife and dutifully attends follow-up appointments.

volume to value. Shore pursued an accountable care organization (ACO) risk-sharing model that could fund program resources to assess and manage SDoH issues. An analytics-based infrastructure assessed patients' health status and social determinants across practices, stratifying patients based on cost of care, chronic conditions, likelihood of hospitalization, and opportunity for outcome improvement.

Shore built a care coordination team to address the specific needs of the high-risk population, including a nurse coordinator, social worker, educator, pharmacy resident, and clinical quality analyst. In collaboration with providers, the program uses a hands-on approach to managing high-risk, high-cost patients with SDoH issues.

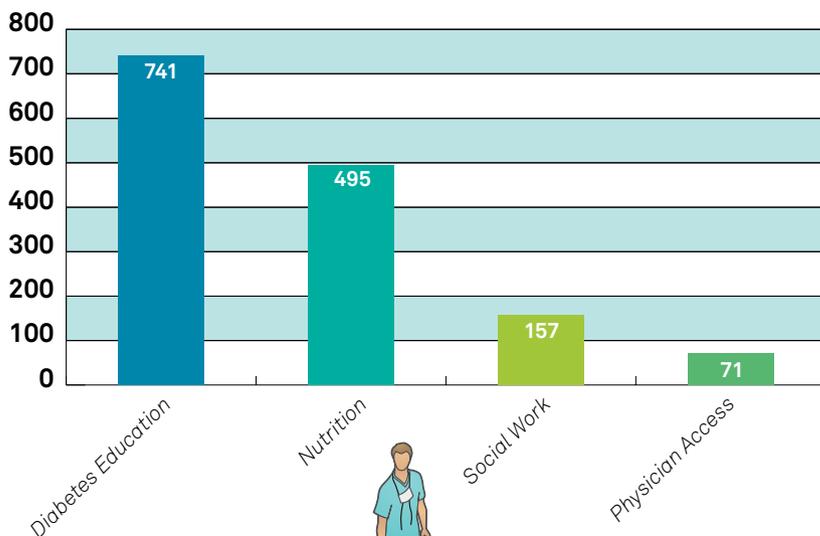
Improving Diabetes Outcomes

Driven by data, one of the initial populations that Shore prioritized was patients with poorly managed diabetes. A diabetes educator was introduced to a subset of these patients to develop individual care plans that include management of social issues. The educator follows up with each patient on a regular basis to monitor progress, provide reinforcement, coordinate care with community-based resources, and communicate progress with the care team. Patients gain a sense of accomplishment as they see their numbers improve, and physicians report a positive attitude in these patients. As of this publication, care coordination team members have worked with 741 patients with diabetes, which equates to half the network's total diabetes population (see Figure 1).

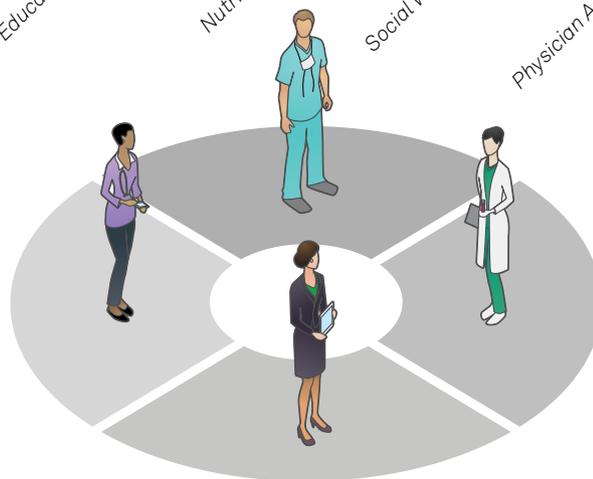
Shore's empowerment of the multidisciplinary team to deliver nontraditional care activities addressing SDoH is noticeably shifting care from health-only to a health-and-wellness focus and has demonstrated cost savings to the organization. The investment in person-centered care has mitigated unnecessary ED visits and hospital admissions attributable to this 741-patient population. Now that the organization has seen positive results, they have empowered the team to deploy similar activities with other high-risk and rising-risk patients where significant social issues are exacerbating chronic conditions. As of July 31, 2017, Shore's care coordination team has delivered 1,464 nonbillable patient interventions to shift the trajectory of health status originating from SDoH issues.

Figure 1

1,464 Interventions by Shore Quality Partners' Care Coordination Staff



Source: Shore Quality Partners, July 31, 2017.



SDoH Team-Building Best Practices

- ① **Care about people.** The care team must be passionate and motivated when conducting face-to-face patient interactions and monitoring progress. Personable team members conduct effective consults, encourage continued patient participation, increase the flow of referrals, and positively contribute to value-based care goals.
- ② **Hire a local social worker.** Local social workers are familiar with community resources and quickly add value in referring patients to the nearest food pantry or utility company contact if electricity is suspended. Local hires are also aware of the area's unique economic factors.
- ③ **Hire bilingual care coordinators.** Bilingual staff are valuable where the network's population has a large non-English-speaking culture.
- ④ **Empower creativity.** Team members with diverse skill sets in nutrition, exercise science, nursing, and even social media find effective ways to engage and motivate patients to revisit old hobbies and activities, learn meal planning and cooking techniques, connect with social groups, and take advantage of other resources in the community to promote health and wellness.

Moving the Needle

Shore's care coordinators work closely with physicians and make inroads across the CIN's patient population. After each office encounter, the interdisciplinary team member "closes the loop" with the patient's PCP by summarizing the visit and recommended care, as well as with the community-based organization involved in the care, and, most importantly, with the patient's care giver(s). All problems, goals, barriers, and intervention notes become part of the patient's record and are accessible to the entire care team, the caregiver, and the patient. Shore's care team includes the following professionals:

- ▶ **Care coordinator.** Conducts patient and caregiver outreach to assess SDoH for high-risk patients and works with them to develop individualized care plans that include resolution of identified social issues; alerts the appropriate team member(s); recommended interventions automatically populate the team members' workflow. Also, works to reschedule missed appointments, identify patients who should have specialist consults, ensures compliance with preventive care and screening, and follows up with patients after ED visits and hospital discharges.
- ▶ **Social worker.** Acts as a bridge, caring for patients in dire need of nonmedical resources, and completes paperwork to help patients access social services, nutrition services such as Women, Infants, and Children (WIC), and disability assistance. Educates and updates both patient and provider. Connects patients with community resources such as job fairs; mobile phones; food pantries and Meals on Wheels; paying for heat and electricity; continuing education; obtaining behavioral health treatment; accessing state-sponsored medication programs; and even job placement counseling. Arranges transportation to medical appointments, if necessary.
- ▶ **Diabetes educator.** Provides training on nutrition, exercise, blood glucose management, and medication management. Collaborates with dietitians employed by Shore Medical Center and ShopRite supermarkets; ShopRite's dietitian walks patients through the grocery store while discussing good food choices and countering negative assumptions by pointing out healthy, low-cost food options.
- ▶ **Pharmacy resident.** Rotates through practices two days per week to reconcile medications and review lists for potential optimization. Analyzes medication profiles of patients with recent ED visits and those with multiple chronic conditions to ensure safety and recommend changes to the primary practitioner.
- ▶ **Clinical quality analyst.** Collects, analyzes, and interprets population-level SDoH data. Flags questionable data such as patterns of unfulfilled prescriptions or predisease indicators like high blood pressure and cortisol. Collaborates with the multidisciplinary team to develop targeted strategies.

Figure 2
Care Coordination Referral Form



CARE COORDINATION REFERRAL FORM
Please complete this form and fax it to (609) 653-1893
If you have any questions please call Luz Valentin at (609) 365-6265

Name: _____	Date of Birth: _____	Gender: M F
Address: _____	Home Phone: _____	
Email: _____	Work Phone: _____	
Cell Phone: _____	Primary Care Physician: _____	
Referring Physician: _____	Group: _____	
Insurance: _____	Ins Phone #: _____	
ID Number: _____		

Diagnosis:

<input type="checkbox"/> Diabetes	<input type="checkbox"/> COPD	<input type="checkbox"/> Sleep Apnea
<input type="checkbox"/> Cardiovascular Disease	<input type="checkbox"/> Asthma	<input type="checkbox"/> Other _____

Additional history:

<input type="checkbox"/> Smoking history (current or history of)	<input type="checkbox"/> More than 2 ER Visits in the last 6 months
<input type="checkbox"/> Etho history (current or hx of)	<input type="checkbox"/> More than 2 Hospitalization in a year
<input type="checkbox"/> Drug abuse (elicit or rx)	

Special Needs:

<input type="checkbox"/> Mental health issues	<input type="checkbox"/> Language Limitations	<input type="checkbox"/> Vision
<input type="checkbox"/> Cognitive Impairment	<input type="checkbox"/> Hearing	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Physical	

Consults: please attach prescription order

<input type="checkbox"/> Podiatry	<input type="checkbox"/> Ophthalmology	<input type="checkbox"/> Sleep Study (Please attach sleep study referral form)
<input type="checkbox"/> Endocrinology	<input type="checkbox"/> Pharmacy	<input type="checkbox"/> Other _____
<input type="checkbox"/> Diabetes Education	<input type="checkbox"/> Social Work	

Pertinent Studies: please attach

<input type="checkbox"/> Medical history	<input type="checkbox"/> Most recent blood work results	<input type="checkbox"/> Medication list
--	---	--

Explanation of Referral

What strategies or approach did you use in the past?

REVISED 3/7/16 |

By instituting innovative outreach services such as those listed above, Shore is advancing care outcomes and reducing costs across the entire CIN.

Evolving SDoH

Shore leaders relied on their knowledge and experience to design the care coordination program, but recognized that staying responsive to the needs of providers and patients requires constant diligence.

For example, while data helped identify candidates for the program, care coordinators were also expecting physician referrals based on data not found in the electronic medical record, such as a recent death in the family, a job change, or move. Investigating low referral rates, they discovered physicians wanted a referral form or process similar to how they manage other referrals. Once Shore created a form that included checkboxes for the nature of services needed, the network noted an immediate increase in referrals (see Figure 2).

In another example, Shore originally planned to see patients in their corporate office but experienced pushback. Based on patient preference and improved engagement results, the CIN moved care coordination services out to practices. For example, the social worker visits designated practices every Wednesday to meet with patients, facilitate referrals, and complete paperwork, yielding fast issue resolution.

Remarkable Results, Repeatable Outcomes

Shore's unique combination of analytics, an SDoH management strategy, and care coordination program is optimizing quality, improving physician effectiveness, and driving business results for the CIN. By orchestrating cost-effective care, Shore reports the following achievements:

- ▶ Decreased spending by high ED utilization patients by \$1,600 per member per month (PMPM)
- ▶ Generated \$4.69 million in 2016 shared savings payments across 16,000 patients
- ▶ Outperformed its geographic comparison group by \$27.97 PMPM (annual savings of \$5.37 million)
- ▶ Reduced inpatient utilization rates by 15%
- ▶ Increased primary care visits by 3%
- ▶ Maintained a 90th percentile ranking (nationwide) in patient satisfaction measures

Six SDoH Lessons Learned

- 1 **Physician advice.** First, present providers with comprehensive data summarizing quality measure performance and costs. Based on this information, these front-line physicians provide specific suggestions for program design and resources to address key challenges such as reducing ED visits, improving medication adherence, etc.
- 2 **Patient convenience.** Disperse care coordination teams to medical offices and schedule patients in tandem with physician appointments. This promotes a collaborative relationship between care coordinators and office staff.
- 3 **No one solution.** Facilitating an effective care coordination program is an evolving process requiring constant diligence. It also hinges on the unique needs of the patient community.
- 4 **Data analysis.** Data analysis focuses resources on patient populations that would benefit most from care coordination activities and helps identify patterns and trends that contribute to cost and quality issues.
- 5 **Physician referrals.** Providers often learn of new SDoH issues that may lead to deterioration of health in the future. By encouraging physician referrals, care coordinators have the opportunity to intervene to maintain wellness and avoid exacerbating disease.
- 6 **Closed-loop communication.** For every patient intervention, care coordinators must summarize the visit and action items for the physician. "Closing the loop" also helps physicians satisfy the wide range of quality measures that they are required to submit.

Although Shore's care coordination program is producing remarkable results, the organization continues to evolve to address new target populations and meet the needs of physicians and patients alike. Addressing SDoH has a significant impact on health outcomes and cost, but providers need the help of an interdisciplinary team to achieve the organization's value-based care goals. [GRJ](#)

Michael Miller is senior managed care analyst at Atlantic Health System in Morristown, New Jersey, and former director of population health and physician relations at Shore Quality Partners in Somers Point, New Jersey. Sanjay Seth, M.D., is executive vice president at HealthEC in Piscataway, New Jersey.

References

1. K. DeSalvo and J. Levi. 2017. Funding for Local Public Health: A Renewed Path for Critical Infrastructure. *Health Affairs Blog*, August 22, 2017. Accessed October 6, 2017 at healthaffairs.org/blog/2017/08/22/funding-for-local-public-health-a-renewed-path-for-critical-infrastructure.
2. J. Noseworthy, J. Madara, D. Cosgrove, et al. 2017. Physician Burnout Is a Public Health Crisis: A Message to Our Fellow Health Care CEOs. *Health Affairs Blog*, March 28, 2017. Accessed October 6, 2017 at healthaffairs.org/doi/10.1377/hblog20170328.059397/full.
3. B. Starfield, L. Shi, and J. Macinko. 2005. Contribution of Primary Care to Health Systems and Health. *Milbank Quarterly*, September 2005 Accessed October 6, 2017 at ncbi.nlm.nih.gov/pmc/articles/PMC2690145.