THE BENEFITS OF USING CARE COORDINATORS IN PRIMARY CARE

A CASE STUDY

Care coordinators can boost quality and revenue by reducing no-shows, improving adherence, and enhancing preventive and chronic care.

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As the health care system begins to shift from a fee-for-service model to risk-sharing models that reward efficiency, many integrated health systems (and the physicians who work for them) are facing a challenge. On the one hand, they must reduce unnecessary utilization, particularly expensive hospitalizations and procedures. On the other hand, they must optimize revenue and quality.

For Trinity Mother Frances Health System in Tyler, Texas, one promising strategy for meeting this challenge is the use of care coordinators. This article describes how care coordinators focused primarily on preventive services to help the system's Trinity Clinic maximize patient quality and reduce unnecessary utilization while increasing downstream revenue for the health system.

Care coordination pilot

Trinity Clinic is a 340-member multispecialty group with 100 primary care physicians that has received level-3 patient-centered medical home (PCMH) recognition from the National Committee for Quality Assurance

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Licensed vocational nurses were chosen based on their clinical ability to order tests, referrals, and refills and have clinical discussions with patients.

for its 18 regional sites. The highly productive Manhattan Clinic in Tyler, Texas, was chosen to conduct a care coordination pilot. This clinic housed four primary care physicians and two advanced practice providers and cared for a panel of roughly 10,000 patients. The advanced practice providers were used primarily for overflow and walk-in appointments, but they also provided some well-woman care. Cumulatively, the providers at this site were managing 120 to 150 patient visits a day for acute, preventive, and follow-up care. The clinic had a history of high-quality care, few no-shows, and no physician turnover for many years. The patient population was predominantly commercially insured with a high percentage of Medicare-eligible patients and a low percentage of patients receiving Medicaid.

Two licensed vocational nurses (LVNs) were hired to fill the care coordinator roles based on the estimated number of patient contacts that needed to be made each day for this clinic. Experience from another provider in our system had shown that one LVN could make 40 to 45 contacts per day. LVNs were chosen based on their clinical ability to order tests, referrals, and refills in our system and have clinical discussions with patients, if needed. The coordinators' duties, shown in the table below, included previsit planning, care gap management, and transitions of care contacts. These duties were monitored on a periodic basis.

Previsit planning. Two to three days before a scheduled patient visit, a care coordinator would call the patient to ask whether he or she was planning to keep the appointment and, if not, would cancel or reschedule the appointment. During the phone call, the care coordinator discussed with the patient any preventive services that were due and scheduled these appointments. Services included mammograms, colonoscopies, and cervical cancer screening. If services had been performed but the reports had not arrived, the coordinator requested that copies be sent to the office. The coordinator also reviewed and reconciled medication lists and ordered any necessary refills per protocols. If needed, labs were pre-ordered in the chart prior to the patient's arrival. This previsit phone call typically took 10 minutes and reduced the time the physician spent on these same issues during the office visit.

Care gap management. For the last nine years, Trinity Clinic has provided physicians with their patients' quality reports and care gap lists, based on HEDIS regional best practices. Patient registry lists provided quarterly from our electronic health record (EHR) identified patients due for checkups for diabetes or coronary artery disease (CAD), as well as certain preventive measures. The care coordinators were responsible for calling patients overdue for services.

Transitions of care contacts. The care coordinators arranged to have the hospital send them a daily list of the clinic's patients who had been discharged. The coordinators called these patients to ensure that they had scheduled or completed their necessary follow-up appointments. They also reconciled their medication lists,

CARE COORDINATOR DUTIES

Duties	Description	Results
Previsit planning	Confirm visits, schedule preventive services, order all labs in advance per protocol, conduct medication reconciliation, order refills	Fewer no-shows, higher visit volume, improved staff satisfaction, increased adherence and revenue, improved outcomes
Care gap management	Follow up with patients who are overdue for services or whose measures are out of range, particularly for chronic illnesses	Increased adherence and revenue, improved outcomes
Transitions of care contacts	Call patient upon discharge	Increased follow-up with primary care provider, decreased readmissions

and made sure the patient understood their discharge instructions. If made within two working days of the patient's discharge, these calls can now support payment of the newly approved transitional care management codes under Medicare.

Results

After six months, the pilot study's results were noteworthy. The clinic already had a very low no-show rate of 4.5 percent because an automated calling system reminded patients of their upcoming appointments 24 to 48 hours prior to their visit. This rate decreased further to 2.8 percent primarily because the previsit phone call helped patients cancel or reschedule instead of just skipping appointments. Eighty percent of the time, staff filled these newly open spots with patients calling in for an office visit, increasing the number of primary care visits by 3 percent compared with the previous year. By comparison, primary care offices across the system experienced a 1 percent to 2 percent decrease in office visits during the same period.

Trinity Clinic historically has focused on quality, measuring primary care providers against HEDIS regional best practice metrics. However, with the addition of the care coordinators, the pilot in the first nine months achieved nine of the 13 national best practice targets (which is the 2012 HEDIS 90th percentile) or improvement from pilot baseline in three areas where no HEDIS target was

PILOT RESULTS VERSUS NATIONAL BEST PRACTICES

CLINICAL QUALITY MEASURES

	Category	Measure	Pilot baseline, December 2011	Pilot performance, September 2012	HEDIS national best practice*
1	Diabetes	A1C screening	88%	95.9%	93%
2	Diabetes	A1C < 7.0%	49%	55.1%	n/a
3	Diabetes	A1C > 9.0%	8%	10.3%	19%
4	Diabetes	LDL screening	85%	91.9%	89%
5	Diabetes	LDL < 100	54%	58.9%	n/a
6	Diabetes	Nephropathy screening	89%	94.8%	88%
7	Diabetes	Eye exams	34%	70.3%	74%
8	CAD	LDL screening	84%	92.4%	92%
9	CAD	LDL < 100	59%	66.1%	n/a
10	Prevention	Colon cancer screening	67%	72.1%	70%
11	Prevention	Breast cancer screening	74%	78.0%	76%
12	Prevention	Cervical cancer screening	41%	46.8%	82%
13	Prevention	Osteoporosis screening	82%	88.1%	82%
14	Prevention	Pneumovax	78%	85.8%	82%
15	Prevention	Flu vaccine	54%	65.3%	61%
16	Prevention	Tobacco counseling	55%	78.4%	84%

* Commercial 2012 HEDIS 90th Percentile Targets: http://bit.ly/125BeR3.

FINANCIAL MEASURES

Service	Pilot baseline, December 2011	Pilot performance, September 2012	Unit change	Net profit per unit	Net profit
Eye exams	273	514	241	$35	$8,435
Colonoscopies	2,416	2,554	138	$650	$89,700
Mammograms	1,453	1,538	85	$85	$7,225
Pneumovax	2,103	2,328	225	$10	$2,250
Flu vaccine	2,780	3,331	551	$18	$9,918
				TOTAL	**$117,528**

* Net revenue calculated by measuring absolute increases in preventive care services attributed to the pilot population during measurement period (December 2011-September 2012).

The no-show rate decreased to 2.8 percent primarily because the previsit phone call helped patients cancel or reschedule instead of just skipping appointments.

available. These included control screening for patients with diabetes, LDL measurement, control for patients with CAD, colonoscopy screening, mammogram screening, osteoporosis screening, and flu vaccination. See the table on page 20.

Of note, the percentage of patients with A1C rates above 9 percent did increase during the pilot, possibly because the care coordinators' recall efforts brought in patients who had not been seen on a regular basis and were not controlling their diabetes. Also, the clinic reported low rates of cervical cancer screening. This was perhaps because the primary care physicians at this clinic are all male, and many patients received their screening from local ob/gyns. Also, the data did not exclude women who had previously had a hysterectomy.

Return on investment. The approximate cost to our system for nine months of care coordination was $68,400, which included LVN salaries of $19 per hour plus benefits. Meanwhile, since the ancillary services were primarily hospital-owned, the health system generated an additional $117,528 in net downstream revenue through the care coordinators' closing of care gaps (see chart on page 20). This figure does not include any revenue generated by fewer no-shows and greater patient access as it would be hard to speculate which office visits were filled because of our care coordinator efforts.

In many cases, this additional revenue did not come out of the patient's pocket. The Affordable Care Act requires most health plans to cover a range of recommended preventive services with no cost sharing by the patient. These services include those rated as "A" or "B" by the U.S. Preventive Services Task Force.[1] Examples of covered services include screening for breast cancer, cervical cancer, and colorectal cancer; screening for HIV for persons at high risk; alcohol misuse counseling; depression screening (when systems are in place to ensure accurate diagnosis, effective treatment, and follow-up); and immunizations. Many patients who once had limited or no coverage for preventive services now have affordable access. Because of this, we believe the need for care coordinators in the future will be greater.

Next steps

The next step is to transition this self-contained clinic model of care to a larger population. The lessons learned on a small scale are being used to deliver these same services to Trinity's Employee Health Plan members regardless of their primary care provider's location. The care coordinators will still physically reside in the Manhatton Clinic but will work virtually for all of the physicians throughout the health system. This is an effort specifically aimed at reducing costs to the health plan and improving employees' health.

Based on our experience, we believe the use of care coordinators is a promising model for practices of all sizes. It can be scaled to fit the needs of a small practice (for example, by dedicating an hour of staff time two or three days a week to phone calls for previsit planning, rather than hiring an additional person to fulfill this role), or several practices could work together virtually to share one or more care coordinators. Starting with a pilot, like Trinity has done, allows practices to experiment with care coordinators and see the benefits for themselves before expanding the model to all of their patients. FPM

1. Koh HK, Sebelius KG. Promoting prevention through the Affordable Care Act. *N Engl J Med.* 2010;363(14):1296-1299.

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- Providers are being pressured to reduce expensive hospital admissions and procedures and maximize revenue and quality.
- LVNs were hired as care coordinators and oversee previsit planning, care gap management, and transition of care contacts.
- The clinic achieved nine of 13 HEDIS best practice targets in the first nine months of the pilot and increased downstream revenue.