Sharp Rees-Stealy medical group’s Enhanced Care Management Program was implemented to care for one of the high-risk patient populations—adults with multiple chronic conditions (MCCs). The goal of the program was aligned with the “Triple Aim,” which was to help patients by providing them with the care and services they need to prevent complications and avoid hospitalizations. The program design was to improve management of patients with MCCs by embedding chronic care nurses into Sharp Rees-Stealy primary care practices.

Sharp Rees-Stealy is a medical group in San Diego County, California, with 20 locations that offer primary and specialty care, laboratory, physical therapy, radiology, pharmacy, and urgent care services. Founded in 1923, today Sharp is a multispecialty medical group of more than 450 physicians and 1,900 staff members representing multiple fields of medicine.

The role of the chronic care nurse in the Enhanced Care Management Program was to collaborate within the practice setting, provide timely coordination of quality services, and address a patient’s specific needs in a cost-effective manner to improve patient health outcomes, which included reducing avoidable hospitalizations. The embedded chronic care nurse was able to achieve this by collaborating with the primary care physician in managing and coordinating care of high-risk patients with MCCs and for posthospital visits.

MCC patients were assessed and followed for these factors:
- Patient-centered goal setting and action planning
- Medication reconciliation and teach back
- Engagement around self-management of chronic diseases
- Resources and barrier assessment
- Psychosocial assessment
- Fall risk screening
- Referrals to community and Sharp resources
- Advance care planning (Physician Orders for Life-Sustaining Treatment [POLST] Education)

The program followed metrics related to Triple Aim:
- Physician acceptance of teamwork with chronic care nurses
- Patient engagement rate toward improving patient experience in managing MCCs
- Hospital admissions for population
- ER visits for population
- Readmission rates for population

Important Triple Aim metrics (see Table) such as senior bed days per 1,000 and commercial bed days per 1,000 decreased. Other metrics did not significantly improve for a variety of reasons, including poor access at the primary care clinics. This imposed barriers on embedded chronic care nurses to follow high-risk patients at the clinic on a frequent basis.

### Triple Aim Metrics One Calendar Year (CY) Outcomes at Sharp Rees-Stealy Medical Group

<table>
<thead>
<tr>
<th>Metric</th>
<th>CY 2010</th>
<th>CY 2012</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient engagement (%)</td>
<td>Not measured</td>
<td>(62)</td>
<td>High engagement rate</td>
</tr>
<tr>
<td>Commercial bed days/k*</td>
<td>177</td>
<td>166</td>
<td>Decreased</td>
</tr>
<tr>
<td>Senior bed days/k</td>
<td>981</td>
<td>954</td>
<td>Decreased</td>
</tr>
<tr>
<td>All-cause commercial readmission (%)</td>
<td>(8.8)</td>
<td>(8.4)</td>
<td>No change</td>
</tr>
<tr>
<td>All-cause senior readmission (%)</td>
<td>(13.7)</td>
<td>(13.7)</td>
<td>No change</td>
</tr>
<tr>
<td>Commercial ER visits/k</td>
<td>114</td>
<td>124</td>
<td>Increased</td>
</tr>
<tr>
<td>Senior ER visits/k</td>
<td>254</td>
<td>286</td>
<td>Increased</td>
</tr>
</tbody>
</table>

* /k = per 1,000.
Physician practices have increasingly accepted chronic care nurses in their practices. Many physicians are comfortable with chronic care nurses present in exam rooms during posthospital visits. Staff has accepted this new care delivery model. Patients are satisfied that they now have a resource to assist them with their complex medical and social needs.

Recent Improvements and Outcomes

Sharp Rees-Stealy physicians have embraced the importance of teamwork in managing patients with MCCs. The program has grown from 8 to 10 nurses. The number of patients seen in a timely manner upon discharge from the hospital has improved to 80%. Of these, nearly 90% of senior patients are now seen by chronic care nurses, and nearly 70% are engaged for ongoing follow-up. The team now works collaboratively with other disease management and case management programs.

With this expansion, an intake nurse has been hired to triage all referrals for the appropriate level of the continuum of care program. In 2013, senior admissions have further decreased to 197 per 1,000, demonstrating an improvement in care of MCCs and reduced exacerbation of underlying problems.

Sustaining Strategies

A framework of the care model has been established with the support of Sharp leadership. Risk stratification allows triaging patients into appropriate care programs. Data, audit, and ongoing education have enabled monitoring of program effectiveness. The through-put and philosophy of matching patients to appropriate program levels have sustained managing the high volume of patients with MCCs.

All program outcomes are aligned with the organization’s strategic goals. In this way, all financial functions are internally aligned.

Future Plans

Data analytics have been targeted for improvement. A third-party solution and interface with existing Sharp systems is planned for implementation. Electronic health record (EHR) systems upgrades will integrate all patient charting on a single platform. This will improve coordination of care among all participating providers. Space planning must be optimized to house the new care team model. New building designs are being explored to allow the embedded care team model to work side by side with physicians.

Improved access to health information is imperative. Face-to-face clinic visits must be supplemented with care provided at the preferred location. A pilot program is in progress to provide telemedicine service for low-risk patients. A home-care program staffed by nurse practitioners and physicians is being rolled out for home-confined patients with MCCs.

Lessons Learned

Next-level health-care delivery must be built to sustain and demonstrate Triple Aim outcomes toward patient care that include:

- Teaming MCC patient management
- Using analytics in identification and management of the highest risk patients
- Providing continuous performance reporting
- Allowing teams to coordinate care across the continuum
- Managing multiple chronic illnesses through use of a common EHR-based care plan
- Engaging, educating, and supporting patients in self-care, including current technology
- Managing medications therapy, social factors, and mental health for optimal stabilization of patients with MCCs
- Providing access to health information via mobile media (eg, telehealth) at preferred locations (eg, patient’s home)