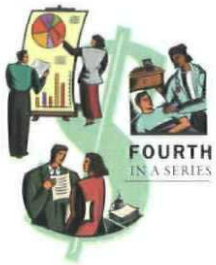

FILLING GAPS IN THE CONTINUUM

Fourth in a Series Examining Revenue Growth Strategies in a Difficult Health Care Market

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This fourth installment of our series on revenue enhancement strategies discusses the continuum of care in terms of patient care settings and service lines. Identifying gaps in the service continuum or capacity constraints can reveal new opportunities to improve patient care and develop and enhance revenues.

The premise that health care organizations need to provide or have access to all components in the continuum of care—including inpatient, outpatient, subacute, and long-term care—has not always been validated by market success in recent years. The value of a full-service provider that offers seamless and efficient care is being tested by Medicare reimbursement changes,[1] past failures in vertical integration,[2] and an apparent retreat from full capitation. However, many reasons to consider planning within the continuum of care framework still exist.

Filling gaps in the continuum is a growth strategy to the extent that it:

- Creates new service capabilities and potential revenue streams
- Provides a new portal of entry into the rest of the continuum
- Amplifies the resources and capabilities of existing areas of the continuum and improves the cost-effectiveness of providing services
- Increases control over a greater part of the health care market
- Enhances seamless care in the most appropriate setting
- Reduces bottlenecks and increases patient satisfaction

A review of current services provided along the continuum, especially within existing product lines, may identify new opportunities for some health care organizations.

The two kinds of continuum examined here include the patient care continuum and the clinical service line continuum. These are potentially overlapping frameworks, but each approach offers some unique aspects to help health care organizations most easily identify gaps in the range of services they provide. Once gaps are identified, each potential opportunity needs to be evaluated to determine its strategic fit and its potential to support the organization's mission and improve its financial performance. Several potential opportunities for revenue and service enhancement within the continuum are described below.

PATIENT CARE CONTINUUM

Figure 1 (page 35) presents the continuum of care for five key patient settings—pre-entry, acute, subacute, outpatient, and home care—and a representative sample of services for each. By applying an organization's existing services to this framework, gaps in the continuum can be identified for potential development. This analysis can be augmented by reviewing patient referral and discharge information to determine the frequency with which patients are referred to other settings for care or services and if any problems arise in this referral because of a lack of available providers, capacity, or processes for facilitating the transition.

Pre-entry One frequently overlooked stage of the continuum is pre-entry or "pre-provider" services, which link patients to the health care system and provide entry into the rest of the continuum. Adequate emergency medical services systems, transportation for seniors, links with long-term care facilities, and community outreach and education are some of the ways to link potential patients with the provider. Although usually not revenue generators themselves, such services build relationships and improve access to and use

of inpatient and outpatient services in the longer term.

Another example of pre-entry services is web technology, which has led to the creation of a new key marketing tool and portal to health care services, particularly for those looking for information and quick access to services. The ability to easily connect patients or potential patients to the services they need by providing online scheduling of appointments, disease management protocols, secure medical record data, and referrals to physicians or other health care services is becoming increasingly important.[3]

Acute Most hospitals provide critical care and telemetry as part of the acute care continuum but do not always have enough capacity to meet today's standard of care and the increasing level of acuity found in many hospitals. As discussed in a previous article in this series ("Increasing Market Share," *Health Progress*, May-June 2001, pp. 28-33), full critical care units can lead to reduced admission levels if the lack of available intensive care unit beds triggers an increase in the incidence of diversion from the emergency department. Assuming intensive care unit beds are being appropriately used, increasing critical care or telemetry bed capacity can lead to reduced incidence of diversion from the emergency department and, therefore, increased admissions and revenues.

For the acute care segment of the continuum, a service gap for some health care organizations is the care for medically complex patients who need a higher level of care than skilled nursing, but require care for a much longer period of time than most acute patients. The long-term acute care hospital has been recognized by Medicare regulations as a provider of specialized acute care services for patients with an average length of stay of 25 days or longer. The long-term acute care hospital provides the opportunity to better manage medically complex patients who would otherwise incur unreimbursed costs in the traditional hospital inpatient setting. The availability of a long-term acute care hospital can lead to significant reduction in Medicare lengths of stay and patient care costs for the referring hospital as well as free up scarce resources such as critical care beds and staff.

Regulations require that a long-term acute care hospital be licensed as a separate hospital with a separate board from the host hospital. Therefore, hospitals frequently partner with specialized long-term acute care providers to lease inpatient space for this unit as a "hospital-within-a-hospital." In addition to lease revenues, long-term acute care providers often purchase treatment, diagnostic, and support services from the host hospital.[4]

Subacute Changes in Medicare prospective payment system (PPS) reimbursements and the Balanced Budget Act of 1997 have led to increased financial uncertainty for many subacute services.[5] Nevertheless, opportunities may exist in subacute services as demand increases in response to improvements in emergency medical care and technology, pressure to reduce acute care lengths of stay, and population growth and aging.[6] New strategies need to be developed to address the

Figure 1

PATIENT CARE CONTINUUM

Pre-entry	Subacute	Acute	Outpatient	Home Care
• EMS	• Critical care	• Skilled nursing	• Partial hospitalization	• Skilled nursing, home health services
• Nonurgent transportation	• Telemetry, stepdown	• Intermediate term	• Urgent care	• Rehabilitation
• Nursing home linkages	• Routine care	• Transitional care	• Primary care/clinics	• Hospice
• Community education and outreach	• Specialty care	• Rehabilitation	• Adult day care	• Assisted living
• Prevention/Screening	• Long-term acute care	• Respite	• Prevention and wellness	
• Web development –Scheduling –Disease management –Information	• 23-hour observation	• 72-hour recovery ambulatory surgery center	• Diagnostic and treatment services • Ambulatory surgery center	

reimbursement caps and documentation needs created by the rehabilitation PPS,[7] but most rehabilitation providers are anticipating improved financial performance once the PPS is finally implemented.[8]

The continuum of care structure developed for rehabilitation services in the mid-1990s by Covenant Healthcare System, Milwaukee, WI, has enabled their multihospital system to adapt quickly to changes in the regulatory and reimbursement environment and to enhance and reconfigure services throughout the continuum. All rehabilitation and subacute services provided in the system—including four inpatient rehabilitation units at four hospitals, two nursing homes, two freestanding subacute units, several ambulatory rehabilitation sites, and home health—were brought under a single management structure, Covenant Rehabilitation Services, Inc. This structure includes a single group of physiatrists overseeing all patient care in the continuum and a service line management team responsible for the integration of all services across the system.

The continuum facilitates patient flow across all care sites, eliminates duplication, and streamlines operations to ensure the provision of cost-effective care. The close alignment of physician and management goals allows changes in patient care protocols and service enhancements to be made very quickly throughout the system. "Our management structure and the integration of our services into one product line has allowed us to weather the regulatory and reimbursement changes we have experienced across the acute, subacute, and ambulatory care continuum in the last several years," said Tim Richman, regional vice president for rehabilitation/oncology at Covenant.

Outpatient The development of accessible and convenient outpatient services, as discussed in a previous article of this series ("Expanding Service Area," *Health Progress*, September-October 2001, pp. 19-21, 84), is important as a potential revenue generator that can expand the service area, as well as:

- Build relationships with physicians, particularly joint ventures
- Redistribute patient volume from congested, inpatient-oriented facilities
- Support patients' transition from the acute care setting to a lower-cost outpatient setting

Business plans for ambulatory development need to consider the impact of outpatient PPS that, although intending to have a neutral effect on budgets, may result in reductions in reimbursement levels for some services.[9]

Home Care Home care providers experienced significant financial hardship and change under Medicare's interim payment system in the late 1990s. The implementation of the prospective payment system in 2000 and changes in the way home care services must be provided and documented will improve the financial performance of these services, which continue to be an important component of delivering needed care cost effectively.[10,11]

The boom in assisted living facilities has slowed in many markets but still remains a potential source of revenue for some hospitals who partner or link with these facilities to provide in-home services and, eventually, inpatient and outpatient services.

Clinical Service Line Continuum

Another continuum that can be evaluated for service and revenue enhancement opportunities is the clinical service line continuum. The service line continuum includes the range of diagnostic and treatment services for a set of related disorders, such as the clinical areas of cardiology, oncology, orthopedics, and neurosciences. **Figure 2** (page 37) shows the treatment continuum and modalities for two major service lines: cardiology and oncology. By looking at the range of disorders and treatment modalities within a clinical service line as well as new emerging technologies, gaps in service delivery and opportunities for new service enhancement may be identified for development.

Cardiology The cardiology service line continues to expand with advances in technology leading to new medical and surgical treatment modalities. Large open-heart surgery programs are exploring new techniques, including "beating heart" procedures that do not use the heart-lung machine. As interventional cardiology becomes safer, some community hospitals are expanding their cardiovascular service lines by initiating invasive cardiology treatment modalities, including open-heart surgery. However, although population growth and aging will continue to fuel the need for surgery, improved stenting techniques and pharmaceutical interventions to reduce restenosis are shifting treatment to angioplasty and catheterization procedures, areas that usually generate significant contribution margin for hospitals.

Advances in technology and improvements in patient safety also are stimulating interest in and

acceptance of primary angioplasty to treat acute myocardial infarction. These procedures are performed on an emergency basis at more than 100 hospitals without open-heart surgery programs. The ability to offer primary angioplasty may provide an opportunity for community hospitals to expand cardiology treatment options. This service does, however, require around-the-clock availability, significant investment in training catheterization laboratory and emergency department staff, and the development of systems to monitor quality of care and outcomes.

A good example of a new service that can leverage a hospital's open-heart surgery capabilities is an emergency department–based chest pain unit. Designed to quickly assess whether a patient is having a heart attack, a chest pain unit can reduce diagnostic and treatment time and lead to reduced complications and better outcomes for the patient. Proposed new reimbursement policies for patients with chest pain seen in the emergency department should also support the financial viability of this program.

The chest pain unit at St. Joseph Medical Center in Towson, MD, treats an average of 175 patients per month. Of these, 15 to 20 percent (approximately 350 patients per year) receive catheterization and, in many cases, surgery. The dedicated staff and treatment protocols allow a patient who is having a heart attack to be examined, prepared for surgery, and sent to the operating room in less than an hour. This approach reduces the damage to the heart, leads to fewer postoperative complications and reduced lengths of stay, and yields better outcomes. Aggressively marketed to the community, this unit has contributed to a 3 percent increase in cardiology admissions, catheterization procedures, and open-heart surgery procedures over the past two years.

At the other end of the continuum, the ongoing long-term needs of patients with congestive heart failure and the high level of resources needed to treat admitted patients have led to increased interest in the development of heart failure management programs. These programs are designed to closely monitor patients and more consistently provide dietary and therapeutic interventions. When successful, they improve the overall care and health status of patients and reduce readmissions and lengths of stay. Although not a major revenue-generator, a congestive heart failure program improves the quality of life for many patients with cardiac disease and indirectly increases revenues.

St. Joseph Medical Center recently opened a heart failure program, staffed by a nurse practitioner, that markets to local primary care physicians and cardiologists and provides a resource for their patients who need education and counseling about diet, weight, and lifestyle issues. The nurse practitioner also works with the physicians to manage the care of admitted patients with heart failure by educating patients and facilitating their treatment plans. This program expedites patients' return to the community and reduces overall length of stay. In addition to the cost savings and improved financial performance generated by minimizing the resources needed to treat these patients, the program generates revenues from the counseling sessions held by the nurse practitioner and increased referrals from primary care physicians.

Oncology The traditional range of cancer treatment services includes surgery, medical oncology (for chemotherapy treatment), and radiation therapy. Technological advances in radiation therapy and a change in Medicare reimbursement are helping to support the growth of intensity-modulated radiation therapy, which allows radiation therapists to more accurately pinpoint and treat tumors while sparing healthy tissue.[12]

Demand for and interest in access to clinical protocols and multidisciplinary disease site-specific care (e.g., breast, prostate) to support improved quality of care are increasing. Restructuring functional treatment areas along disease categories with centers that bring specialists and clinical support personnel together to treat the patient in a coordinated way improves patient satisfaction and creates greater visibility for the service.

Breast care centers are an example of how services can be organized along the continuum to improve patient care and the delivery of services.

Figure 2

COMPONENTS OF A SERVICE LINE CONTINUUM

Cardiology	Oncology
• Open-heart surgery	• Clinical protocols/pathways
• Coronary angioplasty	• Surgery
• Diagnostic catheterization	• Chemotherapy
• Evoked potentials	• Radiation
• Telemetry	• Bone marrow/stem cell transplants
• Diagnostic testing (MRI, CT scan, ultrasound, stress)	• Site-specific centers (e.g., breast care)
• Chest pain	• Health center/resources
• Congestive heart failure	• Alternative/complementary medicine
• Rehabilitation	• Hospice
• Wellness/fitness	• Genetic testing

Public awareness combined with population growth will lead to continued increases in demand for breast cancer screening and early detection. Breast care centers provide breast screening, diagnostic tests, and other related services in a coordinated fashion to minimize wait time for test results and to support a multidisciplinary approach to patient care. In addition to improved quality and customer satisfaction, breast care centers can enhance competitive positioning in a retail-oriented ambulatory care market, improve access to a growing population of perimenopausal and postmenopausal women, increase use of related service lines (e.g., women's health and oncology), and boost overall financial performance.

With recent changes in mammography reimbursement rates, screening mammographies by themselves will not generate much, if any, contribution margin. Rather, the financial benefit of a breast care center largely comes from biopsies, surgical cases, and other follow-up activities that result from the screenings. Many breast care centers have realized margins of 10 percent or better. One large center in the Southeast with 25,000 annual mammograms had a 15 percent margin on breast center operations plus more than $1 million in net revenues from other services for breast center patients.

An important area of the cancer continuum is hospice care. End-of-life and palliative care that support the patient and the family during the last stages of the patient's life is a particularly appropriate service for Catholic health care organizations to offer. Although the Medicare hospice benefit has capped the number of days in hospice care per beneficiary, it can be financially beneficial with careful documentation and marketing to physicians. Health care organizations can also partner with national hospice providers who will lease vacated hospital space and purchase support services from the host hospital.

Alternative treatment and support modalities are being increasingly used to support the cancer care continuum and improve quality of life for the patient. An example of this type of service development to support the cancer continuum of care is the lymphedema program developed at Mercy Health System of Maine in Portland. Mercy's oncology program leadership developed this service in 1996 to treat post breast surgery syndrome experienced by some patients after surgery and radiation for breast cancer. Patients with post breast surgery syndrome and lymphedema may have pain, swelling, limitation in range of motion, cosmetic and functional impairment, and even chronic infection and skin breakdown. "This program is about health maintenance, patient education, and improvement in post-cancer treatment and the patient's quality of life," states Melinda Molin, MD, breast surgeon and physician director of the lymphedema program.

Other cancer specialists, including radiation therapists and medical oncologists, are increasingly referring patients to the program for follow-up care. The lymphedema program also treats edema that arises from venous insufficiency, trauma, and other conditions. Treatments, including wrapping, combined decongestive therapy, manual lymphatic drainage, and rehabilitation, are generally covered by most insurers and result in increased patient satisfaction and improved outcomes. The lymphedema program currently receives 100 to 120 visits per month and will be expanding its capacity in the near future because of the increasing demand for services.

Many service line continuums can be evaluated in similar ways to identify potential gaps in services and new market opportunities. By undertaking comprehensive evaluations of existing services and developing or partnering with others to enhance the continuum of care, health care organizations can improve patient care while improving financial performance. □

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JOURNAL OF THE CATHOLIC HEALTH ASSOCIATION OF THE UNITED STATES www.chausa.org

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Reprinted from *Health Progress*, November-December 2001