TELEMEDICINE:
Effective Strategies to Reduce Rehospitalization and Increase Patient Care Management
About the Authors

Working in collaboration with the ProConnections research team, Dr. Chakrabarti used his experience with telemedicine solutions to offer his insights on how Long-Term Care (LTC) organizations can use these devices to reduce rehospitalization rates while achieving better outcomes at a lower cost.

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As Chief Medical Officer of Clinicore Health Solutions, a Massachusetts-based company that specializes in the management of telemedicine solutions for Skilled Nursing Facilities (SNF), Dr. Chakrabarti has seen the benefits that video consultation brings to his own nursing home patients where he is the Medical Director. Dr. Chakrabarti received his degree from Kasturba Medical College and residency at Carney Hospital in Boston. He is currently Assistant Clinical Professor of Medicine at Tufts Medical School of Medicine and has nineteen years of experience in medicine.

In response to requests from the medical field, ProConnections brought together a team of writers to explore the ramifications of healthcare reform on the Long-Term Care (LTC) industry. The result is an in-depth look at healthcare as it stands today while also exploring the spectrum of payment and care models currently being tested for the future.

ProConnections has a long history in the telemedicine industry, having developed the core audio/visual technology that is used in applications that monitor Intensive Care Unit patients by physicians from a remote location. With over 6,500 systems installed, their research development group identified an opportunity to customize the technology to provide a telemedicine solution to acute and sub-acute facilities to better manage patient care.

This white paper provides useful information for readers who are seeking to learn more about the use of telemedicine in the LTC industry.
Summary

Over the next few years, in response to tremendous change in the healthcare system, sustainability will be a top priority in the long-term care industry in the United States. Maintaining quality of care in the face of escalating costs, new regulations, and potential reimbursement threats is only part of the mounting problem. With the accelerating pace of medical innovation and the aging baby boomer population placing increased demand on an already taxed delivery system,¹ Skilled Nursing Facilities (SNFs) and other Long-term Care (LTC) providers are taking a closer look at the issues of cost, chronic disease management, access to specialists, coordination of care, Medicare reform and the Affordable Care Act (ACA) to find equitable ways to ensure sustainability in the face of healthcare reform.

It’s inevitable; the medical field is changing. As we move to a more patient-centered system of care, physicians will be more closely monitored. Additionally, the collaborative team of health providers will be scrutinized on how well the patient is managed. Higher standards of care will be imposed and a global type of reimbursement will replace the current fee-for-services.

There are three areas of patient care that must be addressed within a short time: the need to improve patient outcomes, contain the cost of medical services and create a more positive experience for the patient as part of his/her continuum of care.

In this white paper you will earn why telemedicine has emerged as the technology identified by government agencies, hospitals and other LTC organizations to effectively address issues of cost, coordination of treatment, chronic disease management and access to care.
Healthcare Reform
Why is it necessary?

1.1 Escalating cost
The United States spent 16 percent of its Gross Domestic Product (GDP) on healthcare in 2008. In fact, US healthcare costs rose from $2.3 trillion in 2008 to $2.5 trillion in 2009. They are expected to reach $4.5 trillion by 2019.²

One of the greatest challenges skilled nursing facilities (SNFs) currently face is the escalating cost of treating patients. Residents are living longer thanks to innovations in medicine and technology like drug therapies, artificial hips, dialysis, transplants, rehabilitative therapies, and medical devices. But longer life can bring with it added complications, like infections, mental illness, and injuries, requiring more medications and services that increase the cost of care over time. In fact, the number of medications for residents as they age goes up to approximately 8.8 medications per month.³

Baby boomers are also beginning to have a significant impact on costs associated with LTC delivery. Not only are they living longer, but many have multiple chronic diseases that require several medications, access to a variety of specialists, and more time for individualized care. With many reaching age 65 in 2012, by 2030 there will be almost 37 million boomers to care for who have multiple chronic conditions.⁴

1.2 Chronic Disease Management
Recent studies indicate that “over two-thirds of long stay residents had multiple physical conditions, and close to two-fifths had both physical and mental/cognitive conditions.”⁵ A 2007 report by the American Hospital Association (AHA) on the effects of aging baby boomers on healthcare in the United States stated that the “cost of healthcare for an individual with more than five chronic conditions is nearly 15 times that of an individual with no chronic
Patients with co-morbidities are also 1.9% more likely to visit the emergency room, adding costs for patient transport as well as potential costs associated with risks of hospital acquired infections and other complications. According to the 2007 AHA report, the number of Boomers with multiple chronic conditions, such as obesity, diabetes, and arthritis, is expected to grow from 1 out of every 10 to as high as 6 out of 10 by 2030.

The treatment and management of chronic conditions puts a large burden on long-term care facilities. Among the most common conditions that require regular monitoring, treatments, and keeping up with best practices are heart disease, stroke, COPD, depression, cancer, dementia, affective disorders, hip fracture, and diabetes. To compound the challenges of patient care, SNFs are facing multiple chronic conditions related to a high rate of obesity. According to the Centers for Disease Control and Prevention, more than one-third of US adults (35.7%) are obese, with an even greater occurrence among adults aged 60 and over. Coronary heart disease, hypertension, stroke, congestive heart failure, high cholesterol, osteoarthritis, gallbladder disease, asthma, sleep apnea, certain cancers, and diabetes are all conditions related to obesity that not only increase the cost of patient care but also the requirements for that care. The increased risk of heart attacks and strokes alone will require long-term care facilities to enhance competencies to meet the demand, such as increased cardiac and physical rehabilitation, to care for obese residents.

Although not always a result of obesity, diabetes mellitus is a common chronic disease that is of growing concern within the general population. Among US residents aged 65 and older, 10.9 million, or 26.9%, had diabetes in 2010. Demographers and healthcare experts in Texas expect the number of adult Texans with diabetes to quadruple over the next three decades as a result of the state’s aging population and out-of-control obesity epidemic. Studies indicate that diabetes mellitus, particularly Type II, has a high prevalence in nursing home patients, affecting more than 360,000 in 2004.

Due to the progressive and complicated nature of chronic obstructive pulmonary disease (COPD), another disease common among nursing home residents, a 2009 study reported that “the presence of COPD was as likely as kidney disease to lead to admission to a skilled nursing facility (SNF) in elderly patients who underwent coronary artery bypass surgery.” The study also reported that in “a Medicaid COPD population, approximately 22% of the respiratory-related healthcare costs are nursing home costs.” COPD affects more than 16 million Americans in the general population. It is estimated that an additional 14 million or more are afflicted with the disease but not yet seeking healthcare. As the population with COPD ages, statistics indicate they will require admission to a SNF, with the likelihood rising to 40% in their last twelve months of life.

There is no doubt that residents with multiple chronic conditions contribute to the rising cost of long-term care because of the additional medications and services they require. Part of that care typically involves the need for a physician specialist, such as a cardiologist, dermatologist, urologist, or pulmonologist, to name a few. Patient access to specialists is not just an issue of cost, soon there just won’t be enough specialists to serve the growing volume of patients. As a result, not only will patients have to travel further for clinical visits and procedures, but even getting those appointments will be a challenge.

### 1.3 Access to Specialists

The Association of American Medical Colleges (AAMC) estimates there will be a shortage of 63,000 doctors by 2015 and 130,600 by 2025. A study by the Bureau of Health Professionals, Cooper, et al. (2002) projected not only a significant shortage of physicians, but specialists in
Influenced by several factors, including Federally mandated health insurance and the shift in demographics as baby boomers reach age 65, the demand for non-primary care physicians continues to grow much faster than supply.

Supply shortages are already projected in individual specialties such as general surgery, urology, ophthalmology, cardiology, pathology, orthopedic surgery, other internal medicine sub-specialties, otolaryngology, radiology and psychiatry. With fewer specialists serving a larger number of patients, within and outside of LTC, obtaining access for SNF patients is likely to grow increasingly more difficult. Patients may have to wait longer for a visit or a procedure if a specialist is booked. In some cases, doctors may not be able to travel to locations where services are needed, making it necessary to transport the patient to the specialist. This gives rise to a whole other set of risks and concerns – patient safety, comfort, stress, risk of infection, as well as transportation costs and logistics, to name a few - particularly when the patient is in a delicate condition. Given the inherent challenges of obtaining access to specialists, finding a way to ensure patients receive timely access without the need to transport them has become imperative.

Soon there just won’t be enough specialists to serve patients!

Then it won’t be just a cost factor. Patients will have to travel further for an appointment and even getting one will be a challenge.

1.4 Coordination of Care

According to Stratis Health, experts in healthcare improvement, “coordination of care is needed to avoid a breakdown in communication that can jeopardize patient safety and quality of care as a result of incomplete and/or inaccurate transfer of information, medication discrepancies, and lack of appropriate post-acute care, leading to adverse medication events, exacerbation of chronic illness, and the inability of patients and families to recognize and react to signs of acute illness.”

Coordination of care is of particular concern for patients with multiple chronic illnesses. Too often specialty physicians, nurses, diagnostic technicians, and others work in isolation from one another, creating disparate “silos” of patient information. To make matters worse, patients are asked to provide information about their illnesses that they don’t fully comprehend.

It has become apparent that without a system of communication in place to coordinate care among all members of the patient’s healthcare team, not only will costs increase but so will the risks to the patient. A patient-centric focus during transitions can be achieved by facilitating and strengthening channels of communication.

1.4a Treat or Transport

The decision to treat a resident onsite or transport the patient to a specialist or hospital is based on many factors, primarily his/her well-being. In addition to the associated costs and logistics, transporting — increases the potential for worsening the patient’s condition and challenging his/her already fragile state. Experts agree that keeping the patient at the SNF, if possible, results in more favorable health outcomes not only for the patient but for the SNF staff and other residents.
Avoiding unnecessary patient transport, particularly for rehospitalization, helps to reduce the risk of complications such as “distress and discomfort for the resident and family; delirium; polypharmacy; falls; incontinence and catheter use; hospital acquired infections; unintentional weight loss and poor nutrition; immobility, de-conditioning and pressure ulcers.” Unfortunately, patients who acquire infections at the hospital, for example, are likely to bring them back to the LTC facility, putting the staff and other residents at risk as well. The goal becomes retaining the patient in the controlled environment of the SNF to reduce exposure to outside dangers like infection.

Making the right assessment and diagnosis to ensure the patient’s safety and avoid unnecessary transport away from the LTC facility presents its own set of challenges. Typically the nursing staff is expected to know “about disease processes associated with advanced age, multiple co-morbidities, and functional impairment to effectively and efficiently identify relevant symptomatology and communicate resident changes.” A lot is riding on the nurse’s ability to accurately relate what she sees to the physician on-call. If the opportunity to keep the patient at the SNF for treatment depends upon the “expedient identification of symptomatology, communication of resident status change, and implementation of recommended treatment,” then establishing a system of coordinated communication that enables the remote physician to recommend treatment based on his/her own, first-hand evaluation of the patient, could potentially reduce the need for transport. It is the accuracy of the evaluation that ultimately dictates whether the patient must be exposed to the risks of transport or can safely remain at the SNF.

### 1.4b Medicare Reform

As a result of escalating costs and in the interests of a higher level of care for beneficiaries, Medicare is in the process of reforming its policies regarding hospital readmissions and other factors within their reimbursement structure. Medicare has recognized that there was little incentive for SNFs and other providers “to coordinate beneficiaries’ care and address wasteful rehospitalizations that occur as a result of inadequate clinical information sharing, inappropriate post-acute placements or other inefficiencies across providers.” Reforms are also bearing down on the practice of cost-shifting between Medicare and Medicaid for dual-eligibles - long-stay Medicaid residents whose hospitalizations, post-acute care, and rehospitalizations are covered by Medicare. Medicare reform seeks to address potentially avoidable hospital readmissions that are putting an unsustainable cost burden on the already troubled program.

Studies indicate that one in four patients admitted to an SNF returned to the hospital within 30 days at a cost to Medicare of $4.3 billion. While sometimes the patient’s condition necessitates returning to the hospital, Medicare recognizes that there are times that the patient’s condition can be effectively treated at the SNF. Congestive heart failure (CHF), respiratory infection, urinary tract infection (UTI), sepsis, and electrolyte imbalance are the five conditions identified by the Medicare Payment Advisory Commission (MedPac) as having accounted for...
78% of all 30-day SNF rehospitalizations that potentially could be avoided. The point that Medicare is trying to make is that with a timely and accurate assessment of the patient’s condition, a prompt and appropriate treatment can be administered that may prevent the condition from deteriorating to the point where rehospitalization is necessary. This clearly illustrates why having timely access to a specialist could help prevent a potentially avoidable rehospitalization.

What’s important for SNFs to understand about Medicare reform is that it is intended to incentivize all LTC providers to coordinate care along the LTC continuum. Policies are designed to enhance beneficiary care and reduce costly rehospitalizations. Evolving reimbursement models indicate a clear paradigm shift from Medicare’s historical fee-for-service model to pay-for-performance (P4P) models. Now facilities may be monetarily penalized in the form of reimbursement adjustments for poor performance and rewarded with shared savings for good performance. Medicare sees these reforms as “an important next step in linking payment to performance.”
2.1 What is the Affordable Care Act (ACA)?

Healthcare Reform, commonly referred to as the ACA (Affordable Care Act), is actually two federal statutes signed into law by President Obama in 2010: the Patient Protection and Affordable Care Act (PPACA, March 23, 2010; upheld by the Supreme Court June 28, 2012) and the Healthcare and Education Reconciliation Act of 2010 (HCERA, March 30, 2010). Seeking to reduce potentially avoidable costs to Medicare by improving care quality and access, particularly for the most vulnerable, the ACA is introducing reforms that place greater emphasis on accountability.

The new “Accountability Requirements for Skilled Nursing Facilities and Nursing Facilities” provide a good indication of the ACA’s direction and the future implications for skilled nursing facilities. By March, 2013, “SNFs and NFs [nursing facilities] must have compliance and ethics programs in operation to prevent and detect criminal, civil, and administrative violations of the Act and to promote quality of care.”

To help SNFs with compliance, the ACA has mandated the Centers for Medicare & Medicaid Services (CMS) “establish standards and provide technical assistance to nursing homes on the development of best practices relating to QAPI [Quality Assessment and Performance Improvement program].” Addressing clinical care, quality of life, resident choice, and care transitions – a mighty tall order – QAPI affects the full range of SNF services. The written QAPI plan must adhere to the governing principles of the program to ensure “safety and high quality with all clinical interventions while emphasizing autonomy and choice in daily life for residents (or resident’s agents).”

It is clear from the language of the ACA, and the types of Medicare policy changes discussed previously, that the Federal government is seeking the cooperation of SNFs and other long-
term care providers to improve healthcare delivery across the board. Facing growing mandates and greater government oversight, SNFs are now looking ‘outside the box’ to find new ways to improve patient care and ensure sustainability while managing ongoing change. Shown to increase access to healthcare, improve outcomes and reduce healthcare costs, telemedicine is finding its way into long-term care.40

2.2 What is Telemedicine?
- An emergency room physician remotely assesses a patient and advises the attending nurse at the SNF whether to treat onsite or transport to the hospital.
- A cardiologist examines and evaluates a stroke patient while away on a business trip.
- An elderly patient in rehab has a consultation with a psychiatrist located 80 miles away.

All of the above are examples of telemedicine. “Viewed as a cost-effective alternative to the more traditional face-to-face way of providing medical care,” telemedicine is not a separate medical specialty but rather a way of delivering quality healthcare via telecommunications technology. Closely associated with “telehealth,” a term with a broader definition of remote healthcare that does not always involve clinical services, telemedicine and telehealth encompass video conferencing, transmission of still images, e-health including patient portals, remote monitoring of vital signs, continuing medical education and nursing call centers.42

Telemedicine is recognized as a viable way to improve a patient’s health. It has grown in use from federally funded programs to extend care to patients in remote areas to becoming integrated into the ongoing operations of emergency rooms, ambulatory care facilities, radiology departments, home health agencies and private physician offices.43

2.3 Uses in the Long-term Care Industry?
Telemedicine is an effective way for LTC providers to meet the requirements set forth by the Affordable Care Act and Medicare Reform. After years of being successfully piloted in numerous care delivery settings, telemedicine has been identified as a key enabler of care reform goals.44 It facilitates coordinated care between the SNF and referring hospital as well as the team of specialists in disparate locations responsible for the patient’s care. The result is improved quality care and reduced rehospitalizations. Studies indicate that telemedicine used in post-acute settings for tele-monitoring and tele-visits or – consults positively address issues of cost, care quality, provider shortage, increasing care demand, and even patient satisfaction.45

As an example, under the old system of care, the nursing staff would access an on-call physician by phone to describe the symptoms a patient has developed and provide the available medical information. The physician would then assess the patient based on this second-hand account, increasing the likelihood of deciding to have the patient transported to the local emergency room, which may or may not be nearby. In this scenario, the ability of the nurse to accurately describe what she sees and knows about the patient directly impacts the care the patient receives. Telemedicine is a much more powerful and effective form of communication because it gives the remote physician access to the patient in real-time. The physician is able...
to assess the patient’s current condition based on individual observation and provide the nursing staff with a diagnosis and care instructions based on what is seen and heard first hand.

Among many health benefits, telemedicine gives the patient access to an offsite physician who can:
- Examine the patient in real-time, including close-up observation of wounds, skin, etc. via a zoom camera;
- Listen to the heart and lungs using a stethoscope;
- Discuss symptoms directly with the patient
- Review live video and images of the inner ear, nose, throat, eye with an otoscope

Equally important to the patient, telemedicine reduces, or in some cases, eliminates the need to transport the patient from the safe, controlled and familiar environment of the SNF to the hospital or clinic to see a specialist. Keeping the patient at the SNF saves the patient from exposure to additional risks of infection, distress, or trauma. This is of particular importance when the patient is already in a fragile state and increased risks could lead to a worsening condition. Additionally, eliminating the need to transport the patient saves the SNF from the logistics of coordinating the transport and in some cases, the lost revenue of an empty bed.

Operational efficiencies to manage costs without compromising patient care are more important now than ever. Having a telemedicine system in place to effectively coordinate care, provide timely access to specialists, and even remotely monitor patients allows for a more efficient delivery of care.

Facilitating remote access to specialists could not only eliminate the need to transport patients but it also deals with the very real issue of time and travel constraints experienced by specialists who are high in demand. Telemedicine affords timely access to a specialist, such as a post-surgical tele-visit from a cardiologist or orthopedic surgeon who needs to check in on a patient’s condition and provide the nursing staff with further instructions. It also allows the SNF to arrange a tele-therapy session with a psychiatrist when a patient exhibits signs of depression or suicidal thoughts. It is estimated that as many as 25% of LTC residents are clinically depressed, while between 20% and 30% display symptoms of non-clinical depression. Many require close observation and prompt therapy because of the real risk of suicide.

Providing quality patient care is of paramount importance to SNFs. They are now faced with greater oversight, increased quality mandates, and potential reimbursement adjustments brought about by the ACA and Medicare Reform. To compound these challenges, the cost to provide care is being impacted by the demographic shift to aging ‘baby boomers’ with multiple chronic diseases. Operational efficiencies to manage costs without compromising patient care are more important now than ever. Having a telemedicine system in place to effectively coordinate care, provide timely access to specialists, and even remotely monitor patients allows for a more efficient delivery of care. With improved quality care and reduced transports for rehospitalization or clinical visits, patients feel better and SNFs get better quality scores. SNFs with good quality score ratings and a low rate of rehospitalization develop good relationships not only with patients and their families, but with referring hospitals that provide business.

2.4 Telemedicine Solutions for SNF’s
Telemedicine facilitates remote access and medical information exchange for:
- specialist referral services for help with diagnosis, evaluations, medications or medical
A flexible and adaptable healthcare delivery platform with a telemedicine system can be configured to meet the growing requirements and capabilities of a specific healthcare delivery environment. Larger environments, like a network of area hospitals, emergency rooms, SNFs and clinics, for example, would need a sophisticated communication system with enough bandwidth for high quality video and audio data being transmitted simultaneously.

There are a wide variety of telemedicine solutions on the market, with some telemedicine devices costing as much as $50,000. The price tag does not necessarily determine the quality or type of device that will work best within a SNF. A high quality telemedicine system can start at around $15,000, offering similar benefits and a wider range of flexibility by using only one server ( appliance) to communicate directly with an end-user PC instead of a system that requires the purchase of two appliances. System cost is also determined by the type of network and hardware set-up needed for the facility. Once the system requirements have been worked out, the final consideration is functionality – deciding what tasks the system will perform.

Many telemedicine audio/video consulting systems can be outfitted with peripherals that are easily plugged in when needed. Peripherals are typically used to assist with specialized tasks for wound care, dermatology, ophthalmology, pathology, and cardiology, to name a few. Among those most commonly used are a wound camera, spirometer, dermascope, vital signs monitor, otoscope, dental probe, ophthalmoscope, and stethoscope. Of course, not all the peripherals are required. In a typical set-up, the facility's system may have a stethoscope, otoscope and wound or zoom camera capabilities. Many of the devices are equipped with cameras that allow for video and still images to be taken, stored, and shared for remote review and analysis. Enabling a high level of patient care, peripherals are a fast and easy way to provide a remote specialist with detailed information about the patient's current condition.
With fast paced advances in medicine, recent integration of patient files to Electronic Medical Records (EMR), and the continued expansion nationwide of high speed broadband all coming together, now is the time for any SNF to consider telemedicine as a way to improve patient quality and management of care. Often resulting in better outcomes, including a reduction in unnecessary rehospitalizations, tele-visits by an offsite physician allow for swift and effective diagnoses and treatments that provide patients with the timely care they require.

An important first step to implementing a telemedicine system at a facility is to understand the challenges and how will be addressed. As a result of its fairly recent expansion among hospitals, medical facilities, and healthcare professionals, telemedicine use has initiated open discussion regarding accountability, risk, reimbursement, and other important factors highlighted below.

3.1 Buy-in
Key issues that medical teams may find difficult to overcome:

- **Trust** – both the patient and professional must trust the technology to be safe and effective. Patients will quickly begin to accept remote care when they realize how fast their medical issues will be addressed by a healthcare professional.
- **Training** – while physicians may use electronics in their personal life, due to time constraints they may resist having to use and rely on them as a professional. Telemedicine service providers offer training and on-going support to ensure fast and easy adjust-
ment to using the system.

- **Reliability** - if the audio or video connection is dropped during a consultation between the physician and patient it could lead to missed instructions.

### 3.2 Uncertain regulations

There are a lot of questions regarding the new healthcare reform regulations; organizations are unsure about what they need to do to be compliant. There is even uncertainty about whether the new rules apply to them. **During this time of regulatory development, many organizations have decided to move forward with telemedicine implementation while others have decided to forgo certain rules and pay the penalty. Healthcare as we know it is changing and organizations that don’t move forward may quickly be left behind.**

“Healthcare is changing from a system where hospitals, physicians and other providers tended to be discrete businesses. Care collaboration and provider integration is the future. Hospitals are increasingly employing physicians. Physician practices, imaging services, rehabilitative centers and hospitals are joining in Accountable Care Organizations. Electronic Health Information Networks share information. These changes are occurring to better serve patients’ needs. While part of the federal government is incentivizing and spurring collaboration and integration of healthcare providers, other offices of government present legal and regulatory barriers that work against these national goals.”

### 3.3 Legalities/Licensing

Legal considerations are a major obstacle to telemedicine integration in the United States. The absence of any national structure allowing health professionals to deliver services in different states using similar standards is one problem. As it stands currently, the physician licensing system requires providers to obtain a license for every state in which they wish to practice. That means each physician must adhere to varied and sometimes conflicting state medical practice rules.

Several states have tried to expedite the licensing process to make it easier for physicians to practice in multiple states. However, in some states, the process can be burdensome, redundant and costly. Doctors typically must complete complex licensing applications and submit credentialing documentation in each state. Getting a license can take several months to a year. With the expansion of telemedicine, it has fueled the need for physicians to bridge the geographic barriers to provide care across multiple state lines.

“In 2011 Congress, with strong bipartisan support, expanded the exemption from multiple state licenses for the Departments of Defense and Veterans Affairs. This practice could also be applied to all Federal and interstate health commerce, such as Federal agencies, Medicare, and Federally-funded health centers” to expedite licensing regulations for physicians.

Other legal considerations include policies that oversee patient privacy and confidentiality. To facilitate telemedicine and the benefits it provides, a national policy is needed for data transfer and storage as well as the sharing of information between healthcare professionals, physicians and specialists.

### 3.4 Internet Access

Recent advancements in Information Technology (IT), and its increasing availability, have been the biggest drivers of telemedicine over the past decade, rapidly creating new possibili-
ties for healthcare service and delivery.

To support some of the more complex telemedicine applications, such as video-conferencing between two or more sites, applications must rely on a high speed internet connections or broadband. It's easy to overlook the fact that many providers around the country still don’t have access to adequate broadband connectivity. This is of particular concern to people living in rural areas who could benefit tremendously from telemedicine because of their limited access to specialists and a need to travel long distances to obtain medical care.

“The Federal Communications Commission (FCC) has implemented the statutory mandate for universal service by creating the Rural Healthcare (RHC) program to improve access to communications services for eligible healthcare providers. In recent years, broadband has become increasingly vital to the effective delivery of healthcare, and it can be uniquely transformative in rural areas, where distance poses a substantial challenge. As of January 2012 — 2,107 healthcare providers were on target to receive $217 million in universal service support through the Pilot Program (an average of about $100,000 per healthcare provider over the award period).”

One of the advantages of a real-time telemedicine consultation to a rural site with limited medical coverage is to provide instant co-management of care between specialists and the on-site healthcare provider. This is particularly important in an emergency situation when immediate feedback from the consulting physician is critical.

3.5 Reimbursement

Medicare currently makes separate payments to providers for the services they furnish to patients for a single illness or course of treatment. This can lead to fragmented care with minimal coordination across providers and healthcare settings. Payment is based on how much a health professional does, and not on the quality of care the patient receives.

With the ACA, Medicare and Medicaid reimbursement models are examining various ways to cover compensation to acute, non-acute and home healthcare operations in order to offset any losses due to the changes in the current fee-for-service reimbursement policy. There are many options currently in testing, but which one of them will be implemented in the future is still unknown.

Many facilities that give care to the elderly or people with chronic diseases have very thin operating margins. With government reimbursement policies in the process of being rewritten or, in some cases, withdrawn or redirected, there is a very real fear among SNFs that the payments won’t be high enough to support all the medical services necessary to give the same quality of care to their patients.

The relatively new field of telemedicine for remote consulting and monitoring can offer real savings to long-term care organizations without sacrificing quality of care. However, implementation is slowed by the need for a nationwide reimbursement policy for remote care, among other changes, and continued investment in internet broadband infrastructure.

“At this writing, Medicare beneficiaries are eligible for telehealth services only if they are presented from an originating site located in a rural Health Professional Shortage Area or in a county outside of a Metropolitan Statistical Area. Or, entities that participate in a Federal Telemedicine Demonstration Projects approved by (or receiving funding from) the Secretary of the Department of Health and Human Services as of December 31, 2000, qualify as originating...
sites regardless of geographic location."  

3.5a Administrative Cost of Implementation

Who should cover the cost of training and implementing telemedicine procedures in a SNF entering into an agreement with a distant healthcare site? Some of the issues that need to be discussed before implementation include:

- What will be the specific responsibilities of care for each site and which organization will monitor them?
- Who will pay for any multi-state licensing of the partnering physicians?
- Which organization will identify standards for the expected quality of service provided to the patient?
- Will a physician peer review team be needed to monitor caregivers?
- What communication system will be selected to facilitate communications and the sharing of information between the various sites? Who will implement it and take on the direct responsibility to maintain and protect the resident’s medical records and information?

As these questions are being answered, each healthcare organization will need to safeguard and secure their individual channels of communication, create policies and terms of accountability, and to educate all administrators, employees, and medical staff members regarding the appropriate and legal use of telehealth technologies.

One of the most significant challenges in a long-term care facility will be educating and training onsite caregivers to embrace the change. Management will need to convene with the team to explain how telemedicine will help the organization to meet goals, as well as discuss any concerns they may have regarding the use of this technology. It is imperative that they understand and embrace the fact that the organization has prioritized this training and is moving forward with adopting new practices of care.

To effectively manage the time and costs required for successful implementation, many SNFs are relying on consulting services outside their organization that are experienced in handling the risks, system set-up and training. [see the chapter on Innovation: Promising Models of Care].

3.6 Testing New Models of Care

“Nearly one in five Medicare patients discharged from a hospital — approximately 2.6 million seniors — is readmitted within 30 days, at a cost of over $26 billion dollars every year. Hospitals have traditionally served as the focal point of efforts to reduce readmissions through quality of care during the hospitalization and discharge planning process. However, it is clear that there are a multiple of factors that impact readmissions that include identifying the key drivers of re-admissions and the downward stream of care providers.”

With the Affordable Care Act, organizations have begun working with CMS to test initiatives
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for better care. Listed below are options currently available that may be of interest to caregivers practicing in the long-term care industry:

**Accountable Care Organizations (ACO) and Shared Savings Programs.** ACO’s are groups of doctors, hospitals, long-term care facilities and other healthcare providers from various settings, who all work together as a team to give coordinated, high quality care to their patients. “The ACO’s will coordinate and integrate Medicare services, with success being gauged by roughly 30 quality measures organized in four domains. The domains include patient experience, care coordination and patient safety, preventive health and at-risk populations. The higher the quality of care providers deliver, the more shared savings their ACO may earn, provided they also lower growth in healthcare expenditures.”

One of the factors of building an ACO is the understanding that it is a “living” structure of care. There is a continuous need to identify and implement procedures that improve medical care and decrease cost. Being a partner in an ACO is a value-added service that demonstrates an organization’s true commitment to the patient, embodying a philosophy of teamwork and managed patient care that is measured by standards of quality set not by the facility but by the ACO.

While ACO’s work to improve care and reduce cost, the involvement of the sub-acute facility is critical to the success of the team. It is important to note, that to be considered a viable affiliate to an ACO, the long-term care facility should have processes and standards already in place that adopt quality control and best practices in the care of their residents.

Samples below:

1. **Advance Payment ACO Model** - The Advance Payment Model is designed to provide support to organizations who demonstrate ability to lower their growth in healthcare costs while meeting performance standards on quality of care and putting the patient first. There are two types of eligible organizations: physician-owned and rural organizations that: (1) do not include any inpatient facilities and have less than $50 million in total revenue and (2) critical access hospitals with inpatient facilities and/or Medicare low-volume rural hospitals and have less than $80 million in total annual revenue.

2. **Pioneer ACO Model** - The Pioneer ACO Model is designed for healthcare organizations and providers that are already experienced in coordinating care for patients across care settings via hospital to sub-acute care, nursing homes or home care and operating in an ACO-like arrangement. “The payment methods tests a population-based model of care and engages other payers in moving toward outcomes-based contracts.”

If an ACO succeeds in delivering quality care while spending less, then they share in the savings with the Centers for Medicare and Medicaid Services. As part of the plan, the physician in the ACO will set up an appointment with the patient to choose which category of care the patient should follow. For example, the physician will decide if a patient is in a high-risk category and assign a care team that includes specialists trained for chronic disease management. There are a number of special channels that the patient may follow, such as - diabetes management, obesity, respiratory, and pulmonary to name a few.

Within this channel or community of care is a team consisting of Physicians, a Registered Nurse, Care Manager and/or Social Worker, and a Pharmacist, that all work together to monitor the specific chronic conditions of the patient. With the patient’s input, the team will address the patient’s individual needs and improve his/her functional health status. At the same time, the team coordinates efforts in order to reduce unnecessary procedures and lower costs.
**Partnerships For Patients.** The Community-based Care Transitions (CCTP) Program hopes to encourage a collaborative network of care for the patient called the Partnership for Patients that aims to reduce preventative errors in hospitals by 40% and hospital readmissions by 20%. The partnership has the potential to save 60,000 lives and reduce millions of preventable injuries and complications in patient care over the next three years and save up to $50 billion in over ten years.  

**Bundled Payments for Acute or Post-Acute Care.** CMS makes a single bundled payment that would encompass all services furnished during the inpatient episode of care (based on likely cost). There are four broadly defined models of care:

1. Retrospective Acute Care Hospital Stay Only
2. Retrospective Acute Care Hospital Stay plus Post-Acute Care
3. Retrospective Post-Acute Care Only
4. Acute Care Hospital Stay Only

Research has shown that bundled payments can offer incentives for providers — hospitals, post-acute care, doctors, home healthcare providers — to partner closely across all specialties to improve the patient’s experience of care during a hospital stay through post-discharge recover.

**Nursing Home Facility to Reduce Hospitalizations.** “According to CMS estimates, about 45 percent of hospitalizations among Medicaid and Medicare nursing home residents are avoidable and last year cost the nation between $7 billion and $8 billion.” The Initiative to Reduce Avoidable Hospitalizations among Nursing home facilities, or RAVEN, is aimed at improving care for Medicare-Medicaid patients, or sometimes referred to as “dual eligibles”, by reducing hospital admissions or rehospitalizations, providing better transition of care, improving health outcomes and providing care at a lower cost. To reduce rehospitalizations, many test sites have introduced the use of new technologies such as telemedicine carts to facilitate one-on-one video conferences between remote primary-care physicians and residents. To better coordinate and manage prescription drugs, project participants work with multiple care providers, including the nursing home patient care team, any attending specialists, and the referring hospital. The RAVEN program also includes policy for initiating end-of-life discussions and planning and support for patients choosing palliative care.

**Interventions to Reduce Acute Care Transfers (INTERACT).** INTERACT is a quality control program that currently involves 30 nursing homes who are working to reduce the frequency of transfers from a sub-acute facility to the hospital. The prospect of future penalties and reimbursement model changes has spurred many hospitals and skilled nursing facilities to look at how they can effectively reduce rehospitalization rates for their organization.

Due to healthcare reform, there are financial rewards to SNFs that have lower rehospitalizations rates for certain medical conditions. By improving the identification and evaluation process prior to transport many hospital readmissions can be avoided.

The first goal is to safely reduce the frequency of transfers to the hospitals by generating a list of procedures for the primary caregiver that tells them what to do when they observe changes in a resident’s medical condition. The RN is quickly alerted for early intervention. If an acute change in the patient’s condition is observed, the physician is then called in to assess (utilizing
the best technology available for consultation), diagnose and if possible, treat the resident at the facility. If transport is necessary, the staff refer to a transfer checklist to properly prepare for the patient’s transition of care between facilities.

Afterward, the team of caregivers meet to complete a quality improvement evaluation that includes suggestions on how to improve the procedures for “best case” outcomes.

Finally, staff learn to identify when it is appropriate to talk about advanced care training and/or arranging a palliative care team in lieu of hospitalization.
4.1 Telemedicine for After-Hours Medical Care

Telemedicine is a relatively new way to bring medical examinations, diagnosis, and treatment services to a patient over a network. Telepresence solutions that include peripherals, such as a stethoscope, otoscope and high quality zoom camera, bring patients face-to-face with an offsite physician who can quickly examine, diagnose and provide treatment options during an off-hours emergency.

There are many challenges faced by skilled nursing facilities to provide timely care to their patients. Physicians using state-of-the-art telemedicine technology to interview, examine and treat patients after-hours can help avoid unnecessary rehospitalizations, improve clinical outcomes, and increase patient and family satisfaction.

In consideration of future regulations stemming from the Affordable Care Act, hospitals are becoming increasingly selective with their referrals and are partnering with proactive Long-term care facilities that can help them keep readmissions to a minimum. After-hours medical care service providers work directly with the SNF’s medical staff to deliver services similar to a hospital’s emergency department.

Clinicore Health Solutions

Clinicore Health Solutions LLC, a leading edge telemedicine company, specializing in telemedicine solutions for Skilled Nursing and Assisted Living Facilities. Providing telemedicine consulting and management services throughout the United States, Clinicore offers a full range of client services, including planning and implementation of a telemedicine program, equipment training for physicians and staff, telemedicine physician outpost design, and IT infrastructure and connectivity services. Clinicore also offers after-hours physician care for acute episodic care when a patient’s physician can’t be reached to SNF’s and Assisted Living
facilities located in Massachusetts. Patient’s living in Assisted Living facilities can have 24/7 access to a physician through telemedicine visits by appointment at their site’s clinic or even in their own apartment at the facility.

Chief Medical Officer of Clinicore Health Solutions, Dr. Aniket Chakrabarti, has long been an advocate of telemedicine. Having witnessed the benefits it provides patients at the skilled nursing facility in Massachusetts where he is Medical Director, Dr. Chakrabarti is able to share here his real-life experiences with telemedicine:

“I had a patient in a nursing home that was admitted for a fall. The patient’s family noticed she was twitching and thought she was having a seizure. The nurse on duty immediately called the physician and they were able to do a telemedicine visit. During the visit the doctor determined the patient was having tremors so prescribed a medication to control it, preventing the patient from going to the hospital. The patient was spared an 8 - 10 hour hospital visit, a myriad of tests, and a round trip ambulance ride. The family was happy they were able to see the doctor and be comforted that someone was able to evaluate their mother quickly in an emergency by utilizing many of the same components that would have been available in a “face-to-face” consultation.

Telemedicine helps patients receive care when there is an urgent medical need that demands immediate evaluation. You are not just relying on a phone call from the nurse; you can actually see and talk to the patients as well as use peripherals to make a clinical judgment before you decide whether to send them to the hospital or treat them at the facility.”

SNFs that use Clinicore Health Solutions will find they are able to use the telemedicine device in a variety of helpful ways. This includes having the nurse case manager and physician attend team meetings with the family, offer faster response to patient emergencies without waiting for the physician’s onsite visit, and aid in the transition of patients from the hospitals to skilled nursing facilities by having the care manager from the hospital do a quick follow-up visit once the patient is settled in his/her room. To find out more about Clinicore Health Solutions go to www.clinicore.com.

4.2 Acute/Post-Acute Partnership

A patient is often seen by a new physician or group every time they move from one healthcare facility to the next. Inefficient information exchange and lack of coordination of care during the transition between different facilities often leads to poor patient care. As a result, many patients end up back in the emergency room or the hospital for the same or similar problems when it could have been avoided with better collaboration between facilities.

With a partnership between the hospital and post-acute facility the patient would be cared for by the same physician or member of the same team of physicians to ensure better coordination of care and improved communication between facilities. This approach improves patient satisfaction while effectively utilizing resources and eliminating waste. Oftentimes, when a patient is released to a sub-acute care facility the same tests are repeated that were already performed in the hospital, either because the information wasn’t available for review or the new physician was not familiar with the patient’s medical history.

An integrative partnership not only leads to better health outcomes at a reduced cost but also better transition of care, better prescription drug management and improved utilization
of staff. It also helps improve patient satisfaction as they are subjected to fewer invasive procedures.

The use of a telemedicine audio-video solution in an acute/post-acute partnership allows medical care practitioners to operate as a cohesive care team without the need for travel between facilities. It ensures the medical team can provide the right treatment options in a timely fashion.
Funding sources change from time to time based on the priorities of Federal, State, and Local Government and Private Foundations. Use the following information as a guide and refer to each of the listed websites listed below to find the most up-to-date information regarding funding requirements and qualifications.

5.1 Federal Grant Programs
The Federal government is providing financial support for the development of telemedicine networks through a variety of grant programs.

http://www.innovations.cms.gov
The Center for Medicare & Medicaid Innovation (the CMS Innovation Center) identifies, develops, supports and evaluates innovative models of payment and care service delivery for Medicare, Medicaid and CHIP beneficiaries using an open, transparent, and competitive process for funding.

Centers for Medicare & Medicaid (CMS) Grant Opportunities - (Centers for Medicare & Medicaid Services (CMS)) - This website provides access to CMS Research & Demonstration grants.

http://www.grants.gov/aboutgrants/agencies_that_provide_grants.jsp
The Department of Health and Human Services allows access to the 26 federal grant-making agencies.
Health Resources and Services Administration (HHRSA) works to increase and improve the use of telehealth to meet the needs of under-served people by collaborating with other Federal agencies, states and private sector groups to create telehealth projects; administering telehealth grant programs; providing technical assistance; evaluating the use of telehealth technologies and programs; developing telehealth policy initiatives to improve access to quality health services; and promoting a knowledge exchange about “best telehealth practices.”

Telemedicine Grants and Funding News

Grants Office Directory Portal Information on grants for a wide range of healthcare-related issues.

The National Library of Medicine (NLM), has funded projects which were intended to serve as models for evaluating the impact of telemedicine on cost, quality, and access to healthcare; assessing various approaches to ensuring the confidentiality of health data transmitted via electronic networks; and testing emerging health data standards.

The Veterans Administration (VA) operates one of the largest hospital systems in the country to support the health needs of the veteran and has embraced the use of telehealth products and services.

The Department of Agriculture Rural Utilities Services Telecommunications program has supported many rural telehealth development projects through grant and guaranteed loans to worthy projects.

The Department of Homeland Security is responsible for managing the nation’s response to emergencies and maintaining border security. As such, it supports development of comprehensive medical response plans. Telehealth has a significant role to play in this activity.

The National Institutes of Health (NIH) is the principal funding source for grants and contracts pertaining to development of medical technology and basic medical science in the United States and is the main portal for accessing NIH grant and contract funding opportunities.

The Health Resources and Services Administration (HRSA) within the U.S. Department of Health and Human Services (DHHS) works to increase and improve the use of telehealth to meet the needs of under-served people, including those living in rural and remote areas, those who are low-income and uninsured or enrolled in Medicaid. HRSA awards preference points in some grant competitions to applications that incorporate telehealth features.

5.2 State Grants and Foundations

The National Association of State Budget Officers distribute funds for medical and biomed-
cal research and development, block grants based on aid formulas to schools and medical intuitions, and via granting programs that resemble Federal grants. Each state's programs are different so please reference your own operating state.

http://www.commonwealthfund.org/Program-Areas/Delivery-System-Innovation-and-Improvement/Long-Term-Care-Quality-Improvement.aspx
As implementation of the Affordable Care Act proceeds, The Commonwealth Fund’s Program on Long-term Care Quality Improvement is supporting efforts to help nursing homes and other providers improve their performance and ensure successful transitions for patients as they move from one level of care to the next.

http://www.statelocalgov.net
The State and Local Government Internet directory provides convenient one-stop access to the websites of thousands of state agencies and county governments.

http://www.health.ny.gov/funding
New York State Department of Health Grants/Funding Opportunities.

http://www.chcf.org/grants/programrelated-investments#ixzz2C1MpDfaV
California Healthcare Foundation (CHCF) pursues “program-related investments” (PRIs) in medical and healthcare devices, technologies, and services through the CHCF Health Innovation Fund.

http://adph.org/ruralhealth/index.asp?id=881
The Alabama Office of Primary Care and Rural Health (OPCRH) serves as a clearinghouse of information for telehealth grant funding opportunities.

http://www.uhccf.org
The United Healthcare Children’s Foundation is dedicated to facilitating access to medical-related services that have the potential to significantly enhance either the clinical condition or the quality of life of the child and that are not fully covered by the available commercial health benefit plan. This “support” is in the form of a medical grant to be used for medical services not covered or not completely covered by commercial health benefit plans.

http://www.verizonfoundation.org/our-focus#health-care
Verizon Foundation improves the quality of healthcare through the delivery of innovative technology-based programs. These programs address the disparities of access to healthcare services in underserved and rural communities.

http://www.rwjf.org
Robert Wood Johnson Foundation seeks to improve the health and healthcare of all Americans.

The Rockefeller Foundation’s Transforming Health Systems initiative employs four key funding strategies: fostering health systems research and agenda setting for universal health coverage; enhancing professional capacity to plan and manage high-performing health systems; harnessing the resources of the private sector to finance; and deliver health services and leveraging interoperable eHealth systems.
Bank of America serves as trustee or co-trustee to a wide variety of discretionary charitable foundations and ensures that meaningful grants are awarded in accordance with each foundation’s philanthropic mission.

5.4 Resources for Grants and Grantwriting

http://www.telemedicine.com
Worldwide experts in the field of Telemedicine and are available as a single resource for the entire process from grant writing through system installation.

http://www.foundationcenter.org
The Foundation Center supports close to 550 foundations and is the leading source of information about philanthropy worldwide.

http://www.cof.org
The Council on Foundations (COF) is a membership organization of more than 2,000 grant-making foundations and giving programs worldwide.

www.grantstation.com
Grant Station provides access to a searchable database of private grantmakers that accept inquiries and proposals from a variety of organizations; federal deadlines; links to state funding agencies; and a growing database of international grantmakers.
ProConnections’ team of engineers have the experience and expertise with digital imaging, data compression and embedded software development to provide custom design, development and manufacturing of innovative audio-video solutions. Collaborating with your team they can create a system specific to your needs.

The company has a long history of successfully designing and manufacturing products for some of the world’s largest medical device suppliers, having developed the core audio/visual technology that is used in applications that monitor Intensive Care Unit patients around the clock. With over 6,500 systems installed, this brings advanced technology and uncomplicated deployment to healthcare professionals and their patients.

ProMCS-2000

At a fraction of the price of most telemedicine solutions, the ProMCS-2000 is a powerful real-time audio/video connection between the doctor and patient when there is an urgent need for medical attention. Based on first-hand observation, the physician can quickly assess the patient’s condition, diagnose and provide treatment options to the onsite caregiver, often preventing rehospitalization.

Checking in remotely through the internet, a physician can offer 24/7 care to patients in a skilled nursing facility. The ProMCS-2000 is outfitted with connectors for peripheral equipment that allow an offsite medical specialist to:

- examine the patient in real-time, including a close-up observation of wounds and skin with an 18 to 1 zoom camera;
- listen to the heart and lungs with a stethoscope;
• review live video of the inner ear, nose, throat and eye via an otoscope;
• and discuss symptoms directly with the patient and caregiver.

The ProMCS-2000 can be used to decrease unnecessary rehospitalizations and costly transfers, increase physician coverage and eliminate travel time, and ultimately, deliver better medical care to your patient for less money.

ProMCS-1000

The ProMCS-1000 allows long-term care physicians the capability to remotely consult with their patients without any geographic limitation.

Easily connected to the user’s PC utilizing broadband internet connection, the ProMCS-1000 offers secure, high quality video consulting capabilities so the healthcare provider can observe, hear and speak with the patient - allowing quicker diagnosis and treatment decisions. The ProMCS-1000 can be used in many types of critical and non-critical situations including psychiatric care clinics, nursing home care team meetings, and educational presentations. More than just a high quality video conferencing solution, the ProMCS-1000 is the best choice for a face-to-face consultation, when time or distance are hindering factors.

• Facilitate quick and easy access to patients, specialists, colleagues
• Expedite your diagnosis and treatment decisions and monitor patient care
• Administer meetings without the expense and inefficiencies of travel
• Enhance operational efficiencies, reduce costs and improve patient satisfaction
• Intuitive, easy-to-use client software with remote camera control

MediaLink

The MediaLink is the perfect fit for facilities that already have video conferencing components such as speakers, microphone and cameras - allowing you to have a fully functional system quickly and easily. Whether analyzing images, evaluating a patient or conducting a video conference for consultation, the MediaLink server and its client software — offers crystal-clear video and audio, including remote camera control providing exceptional functionality.

• Affordable
• Intuitive easy-to-use client software
• Standard I/O connectors and power source for your speaker, microphone, camera

• High quality video/audio with easy integration to your network
• Fully configured with up to 3 simultaneous remote connections

For more information, visit the ProConnections website at www.proconnections.com.
Conclusion

Fragmentation of services is a recognized shortcoming within the current healthcare system in the United States. One patient may see multiple healthcare professionals working in different healthcare networks. There is no cohesive system of care or accountability to monitor prescription medication, duplication of testing and services, or to provide continuity for the transition of care from one specialist or caregiver to the next. Without a solid communication plan in place, a transfer patient could be subject to unnecessary medical procedures or unavailable medical charts, discrepancies in medication as a result of incomplete or inaccurate information, or just the inconvenience of having to share the same information over and over with different doctors. Without a doubt, patients benefit from knowing that their care providers are working together to manage their symptoms.

The use of an audio/video consultation system with peripherals at a SNF not only opens dialogue between healthcare professionals at different facilities, but also allows an offsite physician to diagnose the patient and recommend treatment based on a first-hand evaluation, offering an even greater level of patient care.

Preparing for change
With healthcare reform, value-based care is the new measure of standards and the greatest risk to a skilled nursing facility is believing that it can continuing to operate as usual!! New processes and innovative models of care are being tested and organizations are challenged to find the means to deliver better medical care to the patient for less cost.

How do LTC organizations prepare for the imminent changes in healthcare?
- Start to develop an understanding among clinicians and physicians regarding the need for change. They will have the most involvement in what happens to the patient when entering a skilled nursing facility. Share accountability throughout the entire treatment
cycle with other professionals, possibly outside the facility. If moving toward an “ACO-like” plan, the quality of care patients receive from physicians will need to be reviewed and recorded: For example, rehab goals, controlling polypharmacy, rehospitalization records, length of stay, etc.

- Begin to put together a matrix that includes clear cut measurable standards with procedures to track and trend levels of care.
- Encourage a team approach with the referring hospital regarding the patient’s status in terms of clinical complexity, rehab potential, discharge guidelines and re-hospitalization risk. This care team of practitioners should be able to share patient files and pertinent data for review.
- Begin to track the rehospitalization rates asking important questions: Was a physician onsite? How long did it take for treatment, diagnosis? Condition of the patient? Is there an alternative plan of action for after-hours treatment?
- Create procedures for palliative or end of life care: For example, how they would be introduced to the family and what systems need to be in place for implementation.

**ACO partnership expectations of SNFs**

ACO’s are beginning to develop their own network of caregivers outside the hospital, including partnerships with SNFs that fit their model of care delivery. Physicians from the referring hospital may be assigned to manage the care of its patients at a SNF. To prevent complications and avoid rehospitalizations, patients released to go home from this facility may be referred to the healthcare agency that is owned by the ACO; or the ACO may have its own nurse practitioners that make house calls to high-risk patients.

ACO’s have procedures in place to better control the strategy for the care of its patients. Being affiliated with an ACO offers an SNF the great advantage of receiving patient referrals from network hospitals that are members of the ACO. If the SNF is not part of an ACO then it might have to compete with SNFs that are, requiring it to look to nonaffiliated hospitals in the area for patients, possibly receiving the more difficult cases. ACO’s vary in their requirements but their general expectations are typically as follows:

- Guidelines and pathways for such things as transfer readiness, clinical treatment and rehab goals, length of stay and discharge preparation.
- Admission timeliness and standards of post-acute care and a collaborative care delivery.
- Daily medical management matrix.
- Physician or Nurse Practitioner presence will become mandatory.
- Weekly clinical and case management meetings (attended by a physician).
- Care planning and communication.
- Robust Performance Improvement (PI) process on quality measures including rehospitalization reviews. 

The overall goal is to achieve medical care at a lower cost, improved care for the patient and provide a better overall experience for the patient.

**Further Considerations**

Providing quality care is of paramount importance as skilled nursing facilities and long-term care organizations are facing greater oversight, increased mandates for quality, and potential reimbursement adjustments brought on by ACA and Medicare Reform.

“In 2011 the Center for Medicare and Medicaid Services Administration cut federal Medicare reimbursement rates more than 11 percent, which, according to Mergers & Acquisitions, will
result in a loss of $79 billion over a 10-year period.”66 The same May 2012 article noted that “in order to survive in this highly competitive market place, SNFs must obtain the capital necessary to modernize their facilities and provide adequate care.”67

Now is the time to learn why telemedicine has emerged as the technology identified by the government, hospitals and other healthcare facilities to effectively address issues of cost, access and coordination of care, and chronic disease management. Loss of revenue caused by rehospitalizations, and new mandates affecting costs and the way care is delivered, are reasons enough to investigate the value of telemedicine as a flexible option for meeting the healthcare needs of the future. Anyone affiliated with caring for patients in long-term care facilities can’t afford not to!

**Bottom-line:** Adaptability is essential to sustainability and telemedicine is the key to accountable, better managed patient care for less cost!
Terms and Definitions

ACA The Affordable Care Act was signed into law March 23, 2012 by President Obama. The law puts in place reforms to improve access to affordable care for all Americans, allowing them to make health insurance choices. It also aims to protect consumers from abusive insurance company practices and provide new ways to bring down costs and improve quality of care.

AHA American Hospital Association

AAMC Association of American Medical Colleges

Baby Boomer A person born during the post-World War II period between 1946 and 1964 that marked a large increase in births in the United States.

Broadband An internet connection with a much larger capacity than dial-up or ISDN.

Cardiology A medical specialty dealing with disorders of the heart (specifically the human heart)

COPD Chronic obstructive pulmonary disease is a progressive disease of the lung that limits airflow. It may include emphysema and/or chronic bronchitis.

CMS The Centers for Medicare & Medicaid is a federal agency within the United States Department of Health and Human Services (HHS) that has several healthcare related responsi-
<table>
<thead>
<tr>
<th>Terms/Definitions</th>
<th>Definition</th>
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<tbody>
<tr>
<td><strong>Co-morbidities</strong></td>
<td>In medicine, it is either the presence of one or more disorders (or diseases) in addition to a primary disease or disorder, or the effect of such additional disorders or diseases.</td>
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<tr>
<td><strong>Diabetes mellitus</strong></td>
<td>Diabetes.</td>
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<tr>
<td><strong>Dual eligibles</strong></td>
<td>Refers to individuals with Medicare Part A and/or Part B with limited income and resources who are eligible and may receive help for out-of-pockets medical expenses from their State Medicaid Program.</td>
</tr>
<tr>
<td><strong>Fee-for-service</strong></td>
<td>Based on quantity of healthcare services provided as opposed to quality, this payment model reimburses providers for services billed separately as opposed to bundled. It is believed that this model encourages abuse by incentivizing providers to bill for services not provided.</td>
</tr>
<tr>
<td><strong>Gross Domestic Product (GDP)</strong></td>
<td>The total value of a country's goods produced and services provided over a specific time period. It is used to judge the state of a country's economy.</td>
</tr>
<tr>
<td><strong>Healthcare Reform</strong></td>
<td>Commonly referred to as the Affordable Care Act (ACA), it is actually two federal statutes signed into law by President Obama in 2010: the Patient Protection and Affordable Care Act (PPACA, March 23, 2010; upheld by the Supreme Court June 28, 2012) and the Healthcare and Education Reconciliation Act of 2010 (HCERA, March 30, 2010). [See ACA above.]</td>
</tr>
<tr>
<td><strong>HCERA</strong></td>
<td>Healthcare and Education Reconciliation Act of 2010. [See Healthcare Reform and ACA above.]</td>
</tr>
<tr>
<td><strong>HHS</strong></td>
<td>United States Department of Health and Human Services.</td>
</tr>
<tr>
<td><strong>LTC</strong></td>
<td>Long-term care.</td>
</tr>
<tr>
<td><strong>Medicare Reform</strong></td>
<td>An aspect of the Affordable Care Act that seeks to lower costs to the Medicare and Medicaid programs by improving quality of patient care and provider accountability.</td>
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<tr>
<td><strong>MedPac</strong></td>
<td>The Medicare Payment Advisory Commission (MedPAC) is an independent Congressional agency established by the Balanced Budget Act of 1997 to advise the U.S. Congress on issues affecting the Medicare program.</td>
</tr>
<tr>
<td><strong>Ophthalmology</strong></td>
<td>The branch of medicine that deals with diseases of the eye.</td>
</tr>
<tr>
<td><strong>Orthopedic surgery</strong></td>
<td>The branch of surgery concerned with conditions involving the musculoskeletal system.</td>
</tr>
<tr>
<td><strong>Otolaryngology</strong></td>
<td>The branch of medicine and surgery that specializes in the...</td>
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Pathology

The precise study and diagnosis of disease.

Pay-for-performance

A form of value-based-purchasing in healthcare, also known as P4P, it is a payment model based on a system of incentives and disincentives. Providers are rewarded for patient outcomes that meet pre-established targets but may be penalized for failure to meet targets due to medical errors, lack of coordination of care, or inefficiencies.

Peripherals

Healthcare equipment that can be plugged into a telemedicine system to assist a remote physician or specialist with a patient evaluation. They include a stethoscope, otoscope, wound camera, spirometer, dermascope, vital signs monitor, dental probe, and ophthalmoscope, among others. Many are also equipped with cameras that allow for video and still images to be taken and transmitted. [See Telemedicine below.]

Polypharmacy

The administration of many drugs together.

PPACA

Patient Protection and Affordable Care Act. [See ACA and Healthcare Reform above.]

QAPI

Established by the Centers for Medicare and Medicaid (CMS) in 2003 as the new CoP (Condition of Participation), the Quality Assessment and Performance Improvement Program is a mandate to healthcare facilities like hospitals, skilled nursing facilities, and other long-term care facilities, as well as programs like hospice and home health, to improve their performance by establishing a written QAPI plan that focuses on improved quality of patient care, including safety, coordination of care, and the reduction and prevention of medical errors. The program also includes a web-based facility reporting and data collection tool that makes certain data available to the public.

Rehospitalization

A term used to identify instances where a patient is readmitted to a hospital within 30 days for the same condition. Some hospital readmissions (rehospitalizations) are thought to be avoidable and the result of poor care or a lack of coordination of care between the hospital and skilled nursing facility, as well as a patient’s diverse team of healthcare providers including primary care physician and specialists.

SNF

Skilled nursing facility.

Stratis Health

Stratis Health, based in Bloomington, Minnesota, is a nonprofit organization that leads collaboration and innovation in healthcare quality and safety. It is the Quality Improvement Organization for Minnesota under contract with the Centers for Medicare & Medicaid Services.

Symptomatology

The set of symptoms characteristic of a medical condition or
exhibited by a patient.

**Telemedicine**

It is a system of healthcare delivery that utilizes audio/video conferencing technology for real-time patient evaluations and remote communications with physicians, specialists, and family members. Systems may include peripherals that are easily plugged-in when needed, such as a stethoscope, otoscope and wound camera, that assist the remote physician with evaluations and instructions that serve to guide the healthcare provider onsite to administer the right treatment for patient. A system also allows for the remote monitoring of vital signs.

**Telepresence**

Refers to a set of technologies which allow a person to feel as if they were present, to give the appearance of being present at a place other than their true location.

**Tele-visit**

A remote visit, also known as video visit, using the internet and an audio-video consulting system/laptop PC.

**Urology**

The medical and surgical specialty that focuses on the urinary tracts of males and females, and on the reproductive system of males.
Summary


Escalating Costs


³ American Association for Long Term Care Nursing, ‘Challenges of Caring for Clinically Complex Residents,’ Charlotte Eliopoulos RN, MPH, PhD


Chronic Disease Management

⁵ Ibid, American Association for Long Term Care Nursing

⁶ American Hospital Association, First Consulting Group (FCG)


⁸ Ibid, American Hospital Association, First Consulting Group (FCG)

⁹ Ibid, American Association for Long Term Care Nursing

¹⁰ U.S. Department of Health and Human Services, Centers for Disease Control and Preven-

¹¹ Texas Hospital Association, 2012-2013 Fast Facts on Texas Hospitals, ‘Caring for Texans: An In-depth Look at Texas Hospitals and the People They Serve’

¹² Ibid, American Association for Long Term Care Nursing


¹⁴ Ibid, Texas Hospital Association

¹⁵ Centers for Disease Control, Table 33B. Number and percentage (with standard errors) of nursing home residents by prevalence of diagnoses at time of interview: United States, 2004

¹⁶ Ray A. Pleasants, PharmD, “Chronic Obstructive Pulmonary Disease in Long-Term Care,” Annals of Long Term Care, March 5, 2009

¹⁷ Ibid, Ray A. Pleasants, Annals of Long-Term Care


¹⁹ Ibid, Ray A. Pleasants, Annals of Long-Term Care

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