White Paper

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SUPPORTING A NEW MODEL OF CARE WITH TELEHEALTH TECHNOLOGY

McKESSON

Empowering Healthcare

Introduction

Home healthcare is at a unique crossroads. Providers face a multitude of pressures from every direction — patients, personnel and government. They must contend with a shrinking pool of clinicians, an aging and more chronically ill population, tighter regulations, and declining reimbursement. How providers choose to meet these challenges while continuing to provide outstanding healthcare will be the deciding factor in their future success or failure. This is not a topic for idle speculation. Home healthcare providers must begin formulating a plan to handle these challenges now. They must consider a paradigm shift away from reactive care to a proactive care model.[1] In a proactive system, patients take greater part in their own disease management, and clinicians monitor patients more closely, enabling them to provide preventive intervention before situations become acute. Home healthcare providers can use technology – specifically, interactive telehealth technology – to deliver such proactive care.

Changing Demographics Force a Paradigm Shift

The baby boomer generation and the strain it will place on society frequently grabs headlines — so frequently that we're inclined to stop paying attention. However, home healthcare providers not only cannot ignore this unique phenomenon but they already experience the effects. According to recent statistics, baby boomers comprise 28 percent of the total American population — approximately 76 million people (http://www.bbhq.com). This statistic, coupled with the fact that people now live longer, means that in the near future a far greater proportion of American society will be elderly than at any other time in our history. For the healthcare industry – and the home healthcare industry in particular – that means a large portion of Americans will need more and more medical attention as they continue to age.

While the baby boomers age, another phenomenon threatens the traditional reactive care model: chronic illness caused by sedentary lifestyles and the increase in obesity. Chronic illness is a disease or condition that lasts for a long period of time or is marked by frequent recurrence; for instance, congestive heart failure (CHF), diabetes or asthma. Today, chronic illness affects 45 percent of the American population. Studies show that caring for people with chronic disease consumes approximately 78 percent of all healthcare spending in the United States — more than $1 trillion annually.[2] People with chronic illnesses, who are more likely to see their doctor, account for approximately 80 percent of doctor office consultations. The World Health Organization projects that chronic disease will be the leading cause of disability by 2020 and will be the most expensive problem facing healthcare systems.[3]

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1 U.S. Department of Commerce, 2004.
2 ITAA, 2004.
3 U.K. Department of Health, 2004.

The ballooning population of patients comes at a particularly difficult time for the home healthcare industry. The pool of available clinicians has steadily declined for more than a decade. As a result, home healthcare agencies struggle to find a way to stretch their already over-extended resources to accommodate patients, and it will only become more difficult in the future. Add the continually changing and ever-increasing regulatory demands such as "pay for performance" as well as the growing pressure on agencies to provide high-quality care at lower costs, and the time is ripe for a change that only technology can provide.

Disease Management: A New Model for Healthcare

Today, home healthcare is delivered once an acute situation arises rather than through a proactive model that focuses on disease management. The reactive model only works if all patients have illnesses that eventually are resolved and if an agency has unlimited human and financial resources. Obviously these constraints do not reflect today's healthcare environment. With so many patients, so few clinicians and such a high occurrence of chronic disease that must be steadily monitored rather than resolved, the reactive model is simply inadequate. Medicare, too, is increasingly showing signs of requiring homecare agencies to adopt a new model of care that embraces the tenants of disease management.

Disease management centers on long-term health management rather than illness resolution. Disease management programs strive to improve the patient's outcomes and quality of life. Not surprisingly, disease management is most effective for chronic diseases, which do not have a cure. The disease management model helps patients alter behaviors, manage their health and control symptoms by providing patient guidance and education. Successfully managing a chronic disease requires:

- An open avenue of communication between the patient and caregiver
- A high degree of patient participation in his or her own care
- Vigilance on the part of the clinician

Telehealth technology helps home healthcare providers meet these requirements for an effective disease management program. Today's telehealth technology connects the patient and the homecare provider using an in-home device and an ordinary telephone line. In its most simplistic form, telehealth technology collects patient vital sign readings and transmits rudimentary diagnosis information between the patient and homecare provider. But the technology is capable of much more. Used to its fullest potential, telehealth technology allows the care provider to establish daily, bi-directional communication with the patient, transmit clinical content and monitor every aspect of the patient's condition daily. When used in this way, telehealth technology enables more thorough patient care than a traditional in-home visit.

Extending Telehealth Beyond the Collection of Vitals

The most important factor in any telehealth-based disease management system is its clinical content. Ideally, a telehealth system provides two-way communication of not just physiological information (i.e., vital signs) but education and compliance information as well. Rich clinical content provides diagnosis-specific information, including programs for co-morbidity diagnoses, that takes patient responses into account when determining the next question. For instance, if a CHF patient does not demonstrate an understanding of the significance of shortness of breath or the importance of taking medications each day, the system uses branching logic to transmit appropriate educational information. This individualizes each patient encounter with the telehealth system.

Daily documentation of patient information using telehealth technology allows the care provider to track health patterns over time and detect deviations in patient data that may indicate a decline in health before it becomes acute. A telehealth system also can provide alerts that activate when patient-specific baselines exceed a given parameter, such as weight. (To make the alerts most effective, the homecare agency must modify baselines to ensure that the alerts only fire when a truly serious situation arises.) Taken together, detailed health tracking and alerts allow agencies to fully understand the overall health of the patient — much more so than in the traditional care delivery model.

Using Disease Management to Benefit Patients and Providers

By using interactive telehealth technology to implement a disease management program, home healthcare providers can radically enhance their care delivery system. The benefits of telehealth-based disease management are significant to both the patient and the care provider.

A successful disease management system using telehealth technology helps patients live healthier lives. A study conducted by Mercy Healthcare Sacramento found that CHF patients using telehealth with extensive disease management programs experienced a 73 percent reduction in hospitalization and ER visits and an 80 percent reduction in total inpatient days as compared to standard care.[4] By compelling patients to answer detailed questions not only about their vital sign readings, but about their symptoms and knowledge of their diagnosis, providers make patients active participants in their own well-being.

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4 Health Hero, 2001.

Educating patients about their diagnosis and providing detailed, interactive information helps them modify behaviors and improve medication compliance. Putting patients in charge of their own care leads to an overall improvement in health and outcomes and helps them avoid doctor and hospital visits, which are costly physically, emotionally and financially. Additionally, going through the motions of answering questions on a daily basis gives patients the comfort of knowing they are being looked after and helps reduce feelings of isolation, which can negatively affect their well-being.

Telehealth technology helps agencies provide thorough care and conserve personnel and financial resources. It allows one clinician to oversee the health of many more patients than traditional homecare visits. Daily updates of patient data give the agency far more detailed information about the patient's physical well-being as well as his or her emotional health and understanding of self care — two imperative elements to overall well-being that the agency must address for the patient to maintain an acceptable level of health. Electronic data collection also helps ensure data integrity and helps the agency maintain regulatory compliance.[5]

Using a telehealth monitoring system that automatically ranks patients based on patient-specific baselines allows the agency to track health information and detect changes in the patient's status more quickly. Tracking this information allows case managers to schedule in-home visits only when they are necessary, which helps reduce the cost of providing care and allows the agency to deploy clinicians in a more efficient way. This additional information also gives the care team more insight into the overall health of the patient and improves coordination of care.

Conclusion

Home healthcare providers are facing a complex set of circumstances — from reduced personnel resources to tighter budgetary concerns. Telehealth technology is poised to help them meet these challenges. Using telehealth technology to deploy a disease management program can help caregivers deliver more proactive patient care, education and support that will empower patients and improve the quality of their lives by allowing patients to control their symptoms for more stabilized maintenance.

For More Information

For more information about telehealth technology, contact your account executive or call McKesson at 800-800-5403.

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5 HHS, 2001.

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